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UNIVERSITY CALENDAR

Opening and Closing Dates

	2003	2004	2005
Fall	August 25 – December 12	August 23 – December 10	August 29 – December 16
Homecoming	November 15	TBA	TBA

	2004	2005	2006
Spring	January 7 – April 30	January 5 – April 29	January 9 – April 28
Spring Break	March 8 – 12	March 7 – 11	March 6 – 10

Summer	2004	2005	2006
13 Week	May 10 – August 6	May 9 – August 5	May 9 – August 4
6 Week–1	May 10 – June 18	May 9 – June 17	May 9 – June 16
6 Week–2	June 28 – August 6	June 27 – August 5	June 26 – August 4
8 Week–1	June 21 – August 13	June 20 – August 12	June 19 – August 11
8 Week–2	N/A	N/A	June 26 – August 18
8 Week LAW	May 10 – July 2	May 9 – July 1	May 9 – June 30

Legal Holidays (no classes)

	2003	2004	2005
New Year's Day	Wed., January 1	Thurs., January 1	Fri., Dec. 31, 2004 (Observed)
Martin Luther King, Jr. Day	Mon., January 20	Mon., January 19	Mon., January 17
Memorial Day	Mon., May 26	Mon., May 31	Mon., May 30
Independence Day	Fri., July 4	Mon., July 5 (Observed)	Mon., July 4
Labor Day	Mon., September 1	Mon., September 6	Mon., September 5
Veteran's Day	Tues. November 11	Thurs., November 11	Fri., November 11
Thanksgiving Day	Thurs., November 27	Thurs., November 25	Thurs., November 24
Friday After Thanksgiving	Fri., November 28	Fri., November 26	Fri., November 25
Christmas Day	Thurs., December 25	Fri., December 24 (Observed)	Mon., Dec. 26 (Observed)

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

Admission/Readmission Dates (2003 – 2004)

	Fall 2003	Spring 2004	Summer 2004
United States Undergraduate			
Freshman	March 3, 2003	November 3, 2003	March 1, 2004
Transfer	July 1, 2003	November 3, 2003	March 1, 2004
United States Graduate*	July 1, 2003	November 3, 2003	March 1, 2004
International			
Freshman	March 3, 2003	November 3, 2003	March 1, 2004
Transfer	May 2, 2003	September 1, 2003	February 1, 2004
Graduate*	May 2, 2003	September 1, 2003	February 1, 2004
Readmission			
Undergraduate	July 1, 2003	November 3, 2003	March 1, 2004
Graduate*	July 1, 2003	November 3, 2003	March 1, 2004
Special Student			
Undergraduate	July 1, 2003	November 3, 2003	March 1, 2004
Graduate*	July 1, 2003	November 3, 2003	March 1, 2004

***Note:** many graduate programs have earlier deadlines than the University-wide published dates. Contact the program you wish to apply to for the applicable admission deadline. Programs which use the University-wide deadline may have earlier deadlines for consideration for financial awards.

Admission/Readmission Dates (2004 – 2005)

	Fall 2004	Spring 2005	Summer 2005
United States Undergraduate			
Freshman	March 1, 2004	November 1, 2004	March 1, 2005
Transfer	July 1, 2004	November 1, 2004	March 1, 2005
United States Graduate*	July 1, 2004	November 1, 2004	March 1, 2005
International			
Freshman	March 1, 2004	November 1, 2004	March 1, 2005
Transfer	May 1, 2004	September 1, 2004	February 1, 2005
Graduate*	May 1, 2004	September 1, 2004	February 1, 2005
Readmission			
Undergraduate	July 1, 2004	November 1, 2004	March 1, 2005
Graduate*	July 1, 2004	November 1, 2004	March 1, 2005
Special Student			
Undergraduate	July 1, 2004	November 1, 2004	March 1, 2005
Graduate	July 1, 2004	November 1, 2004	March 1, 2005

***Note:** many graduate programs have earlier deadlines than the University-wide published dates. Contact the program you wish to apply to for the applicable admission deadline. Programs which use the University-wide deadline may have earlier deadlines for consideration for financial awards.

UNIVERSITY NOTICES

Equal Employment Opportunity and Non-discrimination Statement

The Florida State University is committed to a policy of non-discrimination and prohibits unlawful employment discrimination based on race, creed, color, sex, religion, national origin, age, disability, veteran's or marital status. Unlawful discrimination is contrary to the University's standards of civility and collegiality, which recognize the dignity and worth of each person. Unlawful discrimination is a violation of federal and state laws, and University rules and policies. Unlawful discrimination by faculty, staff, students, visitors and contractors is not condoned in the administration of university programs and services.

In pursuing its mission of excellence as a comprehensive, graduate-research university with a liberal arts base, it is the policy of the University to create and maintain a positive work and educational environment conducive to the betterment of the University and, thus, society at large, in the interest of public service and international education. The Florida State University realizes that there is advantage in incorporating diversity from all realms: cultural, positional, social, among others. Further, it is the aim of the University in all lawful ways to carry its stance by:

- Removing barriers that restrict people from realizing their potential;
- Implementing policies, procedures, and programs that ensure opportunities are available equitably to all;
- Building a multidimensional, diversified workforce reflective of the community;
- Fostering leadership and direction that guarantees an accountable, highly participatory, effective institution of higher learning at all levels; and
- Communicating the same to all in various formats as applicable.

The Office of the Dean of the Faculties within the Office of Provost/Vice President, Academic Affairs, serves the University in helping to create an ideal educational environment that encompasses fairness, respect and trust, that is free from mistreatment, discrimination and harassment—through a flexible, yet, balanced approach as it strives to achieve the University's strategic options. For more information, please contact Dr. Anne E. Rowe, Dean of the Faculties at (*850*) *644-1083*, or via e-mail at *arowe@mailer.fsu.edu.*

Human Resources/Office of Diversity Enhancement serves the University by facilitating or otherwise ensuring compliance of its education programs and employment activities with state and federal equal opportunity, equity and affirmative action regulations through collaboration with all appropriate campus offices. For more information, please contact Cheryl Gonzalez, Assistant Director/Human Resources and Employee Ombuds at (*850*) *644-8082*, or via e-mail at *cgonzalez@admin.fsu.edu.*

Persons 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) in prohibiting discrimination against any qualified person 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, *Lower Level, Kellum Hall, Suite 08*. The Florida State University's ADA Coordinator may be contacted as follows: Mr. Robert Pullen, Human Resources/Office of Diversity Enhancement, *University Center, Bldg. A, Suite 6200*.

The Transition Plan, related updates, and self-evaluation reports are available for review in Human Resources/Office of Diversity Enhancement. Upon request, this publication also is available in alternative formats through Human Resources/ Office of Diversity Enhancement, *(850) 644-8142*, via e-mail at *rpullen@admin.fsu.edu* or the Student Disability Resource Center, *(850) 644-9566*, e-mail: *lemiller@admin.fsu.edu.*

HIV/AIDS Policy

Students, employees, and applicants for admission or employment at The Florida State University who have or who may become infected with the HIV virus 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 State of Florida, 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 which require University action.

The University will be guided in its implementation of this policy by current authoritative medical information, applicable federal and state law, the State of Florida, 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.

The Florida State University has designated HIV/AIDS counselors who are available to the University community. These counselors are: Celeste Paquette, M.D., Medical Director Thagard Student Health Center, *(850) 644-2026*; and James Hennessey, Ph.D. Student Counseling, *644-2003*. Anonymous HIV testing is available for students and staff at Thagard Student Health Center. Any interested individuals should call *644-0579* to schedule an appointment.

Sexual Harassment Policy

1. 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 at 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.

2. Office of Inspector General. The Office of Inspector General (OIG) is charged with receiving and investigating sexual harassment complaints, as set forth in this policy, and shall maintain the records pertaining thereto. Within the OIG, the Coordinator of Sexual Harassment Resolutions has primary responsibility for leading these investigations.

3. 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:

a. 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,

b. 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,

c. 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.

4. 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:

a. 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;

b. 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; or

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, the Florida State University Police Department is to be notified immediately and will provide assistance to the victim and initiate an investigation of the crime. For additional information, please refer to the University's 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 shall 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 OIG, who then will proceed as appropriate. Any supervisor[1] 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 OIG. 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.

[1] 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 Office of the Dean of Students (for students), or the Department of Human Resources (for non-faculty employees). 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 Inspector General;
- The Office of the Dean of the Faculties;
- The Office of the Dean of Students;
- The Department of Human Resources;
- A student's school or college dean; or,
- 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 OIG.

b. Preparing a Complaint. The complaint 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; and
- Other information the complainant believes is relevant.

c. Transmitting a Complaint to the OIG. The complaint shall immediately be forwarded to the OIG. 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 OIG 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 OIG will refer the matter to the Office of the General Counsel for appropriate action. If the OIG determines that the alleged perpetrator is a student or employee, the OIG 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 OIG 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 OIG 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 OIG will elicit from the complainant, proposed actions the complainant believes are necessary to address or resolve the alleged harassment. The OIG 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 OIG 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 Department 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 OIG will forward a copy of the complaint and any associated materials to the Office of the Dean of Students, which will, if appropriate, adjudicate the matter under the Code of Student Conduct. The Dean of Students shall notify the OIG 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 OIG. The OIG 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 OIG'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 OIG of the outcome. The OIG 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 OIG 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, the *General Bulletin*, etc.), electronic format (*http://www.inspectorgeneral.fsu.edu/sh/policy*), 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 OIG.

14. Applicability. This policy supercedes 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 ameneded December 31, 2002.

Mission Statement (Approved by BOR, July 28, 1988; revised, May 21, 1999; updated 2002)

Mission. The Florida State University is a comprehensive, graduate-research university with a liberal arts base. It offers undergraduate, graduate, advanced graduate, and professional programs of study; conducts extensive research, and provides service to the public in accord with its statewide mission. The University's primary role is to serve as a center for advanced graduate and professional studies while emphasizing research and providing excellence in undergraduate programs.

In accordance with the University's mission, faculty members have been selected for their commitment to excellence in teaching, their ability in research and creative activity, and their interest in public service. Among the faculty are recipients of many national and international honors, who have included four Nobel laureates and ten members of the National Academy of Sciences.

Given its history, location, and accomplishments, The Florida State University does not expect major changes in its mission during the next decade. Rather, it sees further refinement of that mission with concentration on its strong liberal arts base and on quality in its teaching, research, and public service. The University has established its reputation upon areas of strength by building excellence in the four components of the Science Development Program—physics, chemistry, psychobiology (now neuroscience), and statistics—together with the physical, biological, earth, and mathematical sciences closely related to them. Excellence in these and related areas, particularly materials science, resulted in relocation of the National High Magnetic Field Laboratory to Florida State. Enhancement of the fine and performing arts began with the establishment of the Center for Music Research in the already prestigious School of Music and includes prominent programs in Theatre, Dance, and the Visual Arts. Within the areas of humanities, the Departments of English, Philosophy, Religion, and Humanities are particularly distinguished. Special emphasis in economic policy and government has been directed to the College of Social Sciences' Departments of Economics, Geography, Political Science, Urban and Regional Planning, and School of Public Administration and Policy and to its DeVoe L. Moore and Family Center for Economic Policy and Government and the public policy components of the School of Criminology, the School of Social Work, and the College of Education.

The University's location in the state's capital city provides great opportunity for service and interaction among governmental agencies and the social science and professional schools, especially the colleges of Business and Law and the Pepper Institute on Aging and Public Policy. Special resources, such as the School of Computational Science and Information Technology and the Florida State Conference Center, enhance its ability to deliver such service. The University is

strongly committed to its mission in international education. It provides study-abroad opportunities for its students and faculty through the Florence and London Study Centers, which it operates for the State University System, and through programs in Barbados, Costa Rica, the Republic of Panama, Switzerland, Russia, Cetamura, Italy, Oxford, England, and in Central and Eastern Europe. The University co-sponsors Florida bi-national linkage institutes in Costa Rica and France.

As a comprehensive residential state university, The Florida State University attracts students from every county in Florida, every state in the nation, and 139 foreign countries. The University is committed to high admission standards that ensure quality in its student body, which currently includes 577 National Merit, National Achievement and Hispanic scholars, as well as students with superior creative talents. It also provides alternative admission and highly successful retention programs for special student populations. Most students pursue a full-time course of study in normal progression from high school or undergraduate institutions. Graduate students, who comprise 17.8 percent of the student body, are enrolled in over 204 graduate degree programs of which 72, covering 133 fields, are doctoral. The median age of all students is 23.7 and approximately 12.5 percent, mostly graduate students, are over 31 years old.

A Summons to Responsible Freedom

Values and Moral Standards at The Florida State University

The moral norm which guides conduct and informs policy at The 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.

As the Florida public university most deeply rooted in the liberal arts tradition, The Florida State University not only focuses on intellectual development, but as a community of 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.

The 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.

The Florida State University is committed to nondiscrimination in matters of race, creed, color, sex, national origin, age, and disability. 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 which conform to both the spirit and the letter of all laws against discrimination.

A responsible student recognizes that freedom means the acknowledgment 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 which 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 The 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 The Florida State University, then, is a summons to the exercise of responsible freedom in a community of teaching, learning, and discovery.

Policy for the Use of Photographs and Videos in University Publications

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

Integrity in Research and Creative Activity

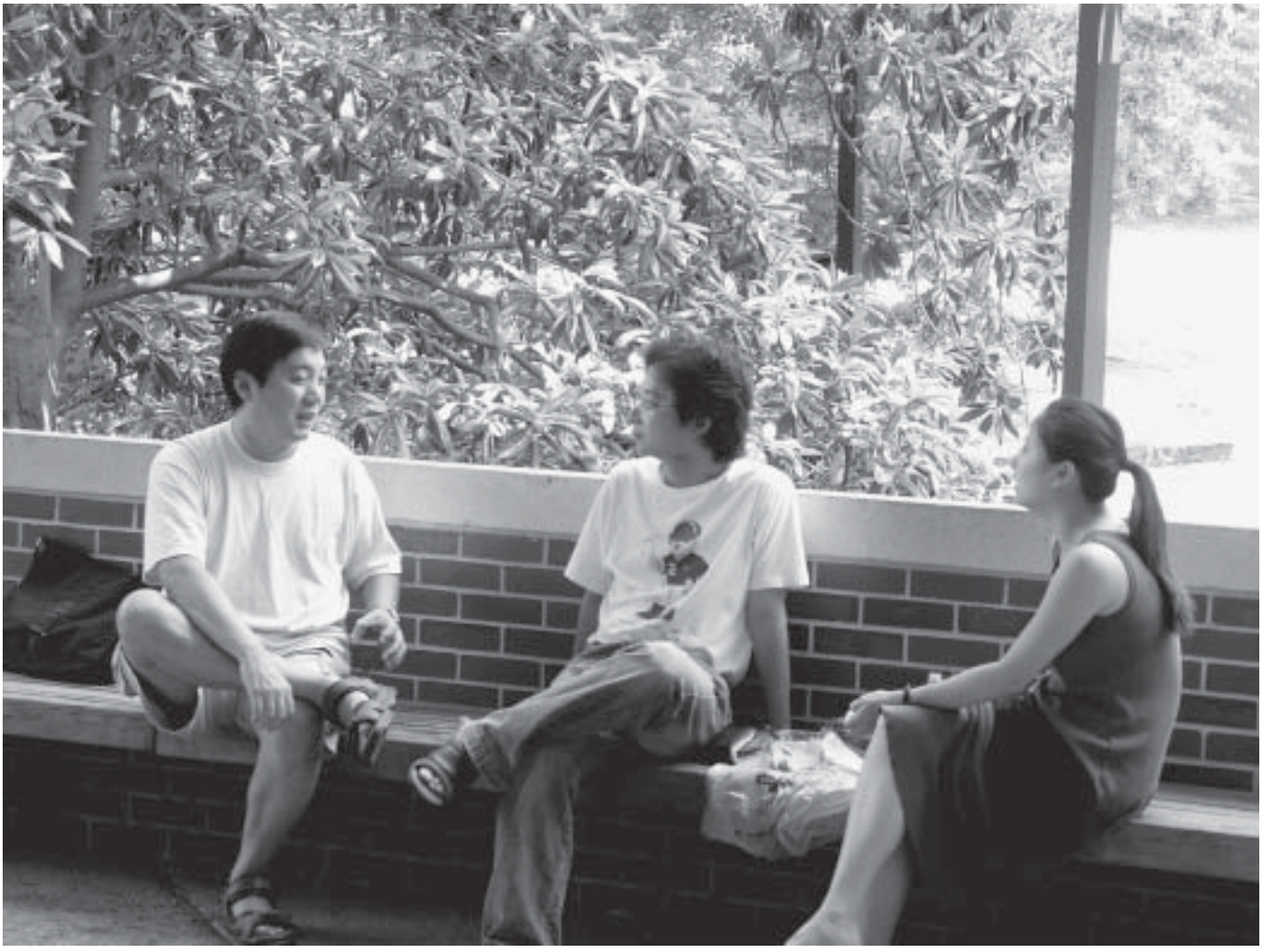
It is the policy of The Florida State University to uphold the highest standards of integrity in research and creative activity, and to protect the right of its employees to engage in research and creative activity. Detailed policies and procedures can be found in the *Faculty Handbook*.

Notification to All Applicants for Admission and Students Attending The 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 which 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.

Garnet E-Mail Accounts for All Students at The Florida State University

The official method of communication at The Florida State University is the ACNS Garnet e-mail account. In order to stay informed and aware, students are required to set up and maintain their account, and check it three times per week. In order to set up an e-mail account, students first must acquire an FSUCard. For more information concerning FSUCards, contact the FSUCard center at *(850) 644-7777*. Students may choose to forward their Garnet account to another e-mail account; however, they still will be responsible for all information distributed by the University to their Garnet account. For more information (including how to set up an account,) log on to *http://cars.acns.fsu.edu* or call the Office of Technology Integration Help Desk at *(850) 644-8502, extension 1*.



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

Standards of Conduct

State of Florida statutes declare that it is unlawful for any person under 21 years of age to possess or consume 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.

Legal Sanctions

Alcohol Offenses

Common Alcohol Offenses	Typical Penalty	Maximum Penalty
(Leon County)	**First Offense**	**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.

Illicit Drugs Offenses

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.

Risks Associated with the Use of Illicit Drugs and the Abuse of Alcohol

Alcohol consumption causes a number of marked changes in behavior. It may increase aggressiveness, lower inhibitions, cloud judgement, reduce resistance, and hamper the ability to make decisions. The effects of alcohol are related to dose, rate of intake, body size and percentage of body fluid, expectations, social environment, physical conditions (disease or more common hormonal cycles can be factors), enzyme differences, and concentration of alcohol in a drink. 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 slows reaction time, reduces muscle coordination and impairs eyesight, contributing to deficits in performance, judgement, memory, and motor skills. Even low doses significantly impair the judgement and coordination required to drive a car safely, increasing the likelihood that the driver will be involved in a crash. Moderate doses of alcohol may increase the odds of a variety of aggressive acts (violent crimes), including murder, rape, assault, vandalism, spouse and child abuse, and drunk driving. High doses of alcohol often cause marked impairment in higher mental functioning, severely altering a person's ability to learn and remember information, leading to blackouts and a general suspension of cognitive abilities. Heavy use may lead to various types of traumatic injury, chronic depression, suicide, fetal alcohol syndrome, respiratory failure, alcohol poisoning, and death.

Prolonged, heavy consumption of alcohol can result in long-term medical problems, including high blood pressure, increased risk of heart attack, pancreatitis, various cancers, cirrhosis of the liver, infectious diseases, mental disorders, and impairment of the central nervous system, all of which may lead to early death. Consistent use of alcohol can lead to tolerance, which is an indication of the body's adjustment to regular drinking, and is a warning sign of alcohol abuse. High tolerance may be an inherited function, which many researchers think is a sign of genetic predisposition to alcoholism. Sudden cessation of alcohol intake by alcoholics is likely to produce withdrawl symptoms, including severe anxiety, tremors, hallucinations, and convulsions, which can be life-threatening.

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 inhalents. 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 expose users to criminal elements, which may lead to involvement in further criminal activities.

Information on Alcohol and Drugs and Treatment Referral

Thagard Student Health Center's Health Enhancement Department, *(850) 644-8871*, provides educational workshops for any audience on request. It has an extensive reference library and refers students seeking assistance with alcohol and drug matters.

Additional resources include:

- The Tallahassee Telephone Counseling and Referral Service, *224-NEED.*
- Narcotics Anonymous, *599-2876*,
- Alcoholics Anonymous, *224-1818*,
- The Florida State University Student Counseling Center, *644-2003*, is available to students for counseling and support services.
- The Florida State University Marriage and Family Therapy Clinic (*644-1588*) provides limited treatment services.

Additional Information is available on the Internet at the following websites:

1. Children of Alcoholics Foundation at *http://www.coaf.org.*
2. National Association for Children of Alcoholics at *http://www.health.org/nacoa.*
3. Alcoholics Anonymous at *http://www.alcoholics-anonymous.org.*
4. Families and Friends of Alcoholics at *http://www.al-anon-alateen.org.*

University Disciplinary Sanctions for Alcohol/Drug Offenses

The disciplinary function at The Florida State University is an integral part of the educational mission of the University. Students in violation of state laws, city ordinances, or University policies will be reported to The Florida State University authorities for disciplinary action. Disciplinary processes are outlined in the *Florida State University Student Handbook* which gives the University authority to impose sanctions including suspension, dismissal, and expulsion. Parental notification under certain circumstances is integral to University protocol regarding alcohol use.

THE UNIVERSITY

University History

The 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 which 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, The Florida State University Army ROTC cadet corps is today one of only three in the nation authorized to display a battle streamer with its flag, a streamer which bears the words "Natural Bridge 1865." After the end of the war in 1865, however, Union troops under General McCook descended upon Tallahassee and occupied the city (including campus buildings), remaining for more than a month.

Following the war, the institution entered a period of growth and development. In 1884 the first diplomas, Licentiates of Instruction, were awarded, and by 1891 the Institute had begun to focus clearly on what we would today call postsecondary education; seven bachelor of arts (BA) 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 which 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 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 Panama Canal Branch was opened, and 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, The Florida State University has added to its academic organization and now comprises 17 colleges and schools. It has expanded from the original few acres and buildings to 513 buildings on nearly 1,423.2 acres, including the downtown Tallahassee main campus of 463.4 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 University Computing Center and Division of Research at Innovation Park; and the branch campus in Panama City, Florida. The Florida State University celebrated its 50th year as a university in 1997, with a student population of over 30,000, and recognition as a major graduate research institution with an established international reputation.

The fall 2002 enrollment totaled 36,683 students from all 50 states and 132 countries. The breakdown by class included 7,335 freshmen, 5,601 sophomores, 7,894 juniors, 7,910 seniors, 750 law students, 1,338 special students, and 5,855 graduate students. Of the student body, 44.0% are men, 56.0% women. The faculty totaled 2,043.

University Organization

The Florida State University is one of eleven units of the Division of Colleges and Universities (DCU) of the State Board of Education (SBOE). The State Board of Education, 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 the FBOG oversee the 13-member Boards of Trustees for each of Florida's public universities through the Chancellor of Colleges and Universities. The Florida State University 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. The Florida State University also offers degree programs in Panama City, Sarasota, and the Republic of Panama; instructional programs in London, Florence, and Valencia; and research, development, and/or service programs in Costa Rica, Croatia, and Italy.

The chief executive officer of The Florida State University is the President. He is assisted by the Provost (who is also the Vice President for Academic Affairs), the Dean of the Faculties and Deputy Provost, the Vice President for Finance and Administration, the Vice President for Student Affairs, the Vice President for Research, the Vice President for University Relations, the Director of University Communications, 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 is responsible for the administration of all faculty personnel matters and academic rules and regulations and facilitates the operation of the Faculty Governance System of the University; the Office of Graduate Studies, which is responsible for the recruitment and advising of graduate students; 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 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.

College, School and Department Overviews

In the humanities, the University is a nationally recognized center of excellence in graduate training. A number of humanities faculty members have distinguished themselves through service as heads of national academic organizations in philosophy, English, history, and religion.

The University has not only one of the largest graduate-level programs in the study of religion, but it is also one of the most highly regarded. The program exposes students to rigorous seminars led by experts in theology and the philosophy of religion.

Several humanities departments publish their own magazines and sponsor lecture programs, and many faculty members edit scholarly journals. In recent years, a number of these departments have won national acclaim and today are considered among the best in the South.

The **Creative Writing Program** of the English Department, placed solidly on the literary map of the U.S. with the acclaim of its short short story competition, annually sponsors the "Spring Writer's Festival." The festival includes a series of seminars led by noted authors and editors.

The Department of Anthropology sponsors several archaeological projects in sites throughout eight Southeastern states, Puerto Rico, and the Virgin Islands. The **Warm Mineral Springs project** site in Sarasota County, the only underwater archaeological research project in the world, received international recognition with the discovery of skeletons and fossilized artifacts over 10,000 years old. The **Southeast Archaeological Center (SEAC)**, part of the U.S. Department of Interior's National Park Service, is headquartered at the University. Chosen because of the University's well-known program in historical archaeology, the center is responsible for over 6,500 archaeological sites in 60 national parks, with interests ranging from Florida shipwrecks to Confederate prisoner-of-war camps.

In response to the ever-expanding web of human and technological channels of communication, the College of Communication, with its research on communication, has distinguished itself as one of the leading programs in the country. The **Communication Research Center (CRC)**, one of the largest communication research centers and laboratory facilities in the nation, is equipped for interpersonal, small group, survey, public opinion, and physiological research and content analysis of print, audiotape, and videotape and film. The **Tarrance Archives of Public Opinion Research**, located within the CRC, contains over 200,000 interviews. The archives offer the student opportunities for the study of public opinion, politics, demography, campaign strategy, and communication effects. The **Communication Sciences Laboratory** houses a variety of instrumentation systems for the measurement and analysis of the production, transmission, and reception of the speech-voice signal. Available for student and faculty research are state-of-the-art recording, intensity, and pitch analysis equipment, sound level meters, computer interfaced aero-mechanical detection and measurement apparatus, electroglottograph, computer technology that facilitates the measurement and display of physiological information about speech and voice, and a comprehensive computerized hearing measurement laboratory.

The purpose of the **Center for Information Systems Research**, a major unit of the Department of Management Information Systems of the College of Business, is to support high-level research into the nature and use of information in organizations and to enhance the management of information resources in all sectors of society. Through employment in the center, which is supported by a variety of organizations and individuals, students have the opportunity to expand their knowledge of specialized technology. Another major component of the department is the **Center for Advancement of Procurement**, which supports research into the nature of procurement and materials management and assists practicing managers in professional development.

The arts at The Florida State University have been an important and essential part of the University's mission since its early development as a premier liberal arts institution in the early l900s. The schools of Music, Theatre, and Visual Arts and Dance contribute to this mission in several ways. They provide leadership for the cultural development of the state, and they provide state and national service to their professions through research programs, creative activities, symposiums, and various continuing educational services. The arts schools also contribute a wide spectrum of public service and outreach activities by offering extensive performances and exhibits both on campus and throughout the state, and by bringing leading arts professionals to Florida through special festivals and national and international meetings of professional organizations.

The Florida State University **Museum of Fine Arts**, a division of the School of Visual Arts and Dance, is the major art museum in the area. The Gallery, occupying 16,000 square feet, serves as an exhibition, information, and documentation center for contemporary art and significant developments in art history. The school also administers the **Appleton Museum and Collection**, located in Ocala, Florida. Works of art bridging many cultures over thousands of years form the core of the school's outreach program in central Florida and provide rich source material for students of art and art history. The Department of Art History has a collection of over 350,000 images and a growing collection of multimedia images, CDs and videos, both of which are overseen by a slide curator and photographer to assist graduate students and faculty.

Some of the finest music research resources are available through the School of Music. The research equipment, laboratories, studios, and recital halls enhance the education of the graduate performers and composers and the performance of the schools numerous and varied organizations—from Baroque and Jazz Ensembles to the Marching Chiefs to the University Symphony.

The School of Theatre's public performances reflect the full range of dramatic literature, providing the graduate student the chance to experience live theatre—whether dramatic masterpieces, musicals, or experimental productions—and the choice to participate in its creation.

The arts disciplines at The Florida State University are among the most comprehensive of any university in the nation. They provide extensive and varied academic offerings, both for general University students and for students who wish to pursue professional careers in the arts, whether as creative artists, performers, scholars, or educators.

Training with top-name professionals, of utmost importance in the field of dance, is offered through the Department of Dance, where the physical and aesthetic talents of students are developed to their fullest. Performances are annually showcased through the department's numerous productions.

The University's galleries offer an active internship program and course work for theoretical and practical experience.

The **Conservatory of Professional Actor Training** provides an intensive program for actors, as does as the **Institute for Theatre Training**, where professional actors instruct students and demonstrate their own artistry.

Panama City Campus

In 1982 the Florida Legislature established a campus of The Florida State University at Panama City. 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. Located 100 miles west of Tallahassee on beautiful North Bay, the Panama City campus provides opportunities for undergraduate and graduate study in 14 programs leading to the bachelor's degree, 18 programs leading to the master's degree and one program leading to the specialist's degree. To complement the local community college, the Panama City campus offers no courses at the freshman and sophomore levels. Applicants for admission must complete the first two years of college work elsewhere.

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. About 80 percent of the courses are taught by faculty who teach at both the Panama City campus and the main campus. This ensures a quality of instruction reflecting the standards and values that are predominant on the main campus.

Colleges and Schools

The academic organization of the University comprises 17 colleges and schools. One of these, the College of Engineering, is a joint program of the Florida Agricultural and Mechanical University (FAMU) and The Florida State University. The colleges and schools offer courses of study in 25 major disciplines. In addition to the associate in arts (AA) certificate, they offer 96 authorized baccalaureate degree programs covering 193 fields, 100 authorized master's degree programs covering 194 fields, 31 authorized advanced master's and specialist degree programs covering 35 fields, two authorized professional degree programs covering eight fields, and 72 authorized doctoral degree programs covering 135 fields. The following outlines the academic divisions:

College of Arts and Sciences

Departments: Aerospace Studies; Anthropology; Biological Science; Chemistry and Biochemistry; Classical Languages, Literature, and Civilization; Computer Science; English; Geological Sciences, History; Mathematics; Meteorology; Military Science; Modern Languages and Linguistics; Oceanography; Philosophy; Physics; Psychology; Religion; Statistics.

Interdisciplinary Programs: American and Florida Studies; Asian Studies; British Studies; Chemical Physics; Classics and Religion; Cognitive Science; Critical Theory; English and Business; Foreign Language and Business; Geophysical Fluid Dynamics; Humanities; Italian Studies; Latin American and Caribbean Studies; Molecular Biophysics; Neuroscience; Program in Chemical Physics; Psychobiology; Neuroscience Research; Russian and East European Studies; Secondary Science and/or Mathematics Teaching; Women's Studies.

College of Business

School: Dedman School of Hospitality

Departments: Accounting; Finance; Management; Management Information Systems; Marketing; Risk Management/Insurance and Real Estate.

Interdisciplinary Programs: Business Administration and Law; Multinational Business.

College of Communication

Departments: Communication; Communication Disorders.

School of Criminology and Criminal Justice

College of Education

Departments: Educational Leadership and Policy Studies; Educational Psychology and Learning Systems; Elementary and Early Childhood Education; Middle and Secondary Education; Special Education; Sport Management, Recreation Management and Physical Education.

FAMU—FSU College of Engineering

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

College of Human Sciences

Departments: Family and Child Sciences; Nutrition, Food and Exercise Sciences; Textiles and Consumer Sciences.

Interdivisional Programs: Marriage and Family; Independent Living for Persons with Disabilities.

School of Information Studies

College of Law

Interdisciplinary Programs: Law and Business Administration; Law and Economics; Law and International Affairs; Law and Public Administration; Law and Urban and Regional Planning.

College of Medicine

School of Motion Picture, Television, and Recording Arts

School of Music

Interdisciplinary Program: Music Research.

School of Nursing

College of Social Sciences

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; Health Services Administration and Policy; International Affairs; Pepper Institute on Aging and Public Policy; Marriage and Family; Devoe L. Moore Center for the Study of Critical Issues in Economic Policy and Government; Russian and East European Studies; Program in Social Science; Urban and Regional Planning and Public Administration.

School of Social Work

School of Theatre

School of Visual Arts and Dance

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

Interdisciplinary Programs: Arts Administration.

Institutes and Research Centers

The work of the colleges and schools 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 Intensive English Studies

Center for Professional Development and Public Service

Learning Systems

Learning Systems Institute

Science and Public Affairs

Beaches and Shores Resource Center

Center for the Advancement of Human Rights

Center for Biomedical and Toxicological Research and Hazardous Waste Management

Center for Economic Forecasting and Analysis

Center for Prevention and Early Intervention Policy

Florida Center for Public Management

Florida Conflict Resolution Consortium

Florida Institute of Government

Florida Resources and Environmental Analysis Center

Florida State Climate Center

Institute for International Cooperative Environmental Research

- 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

The Florida Center for Tobacco Education

International Programs

Florida–Costa Rica Linkage Institute (FLORICA)

Florida–France Linkage Institute

College of Arts and Sciences

Antarctic Marine Geology Research Facility

Center for Materials Research and Technology

Center for Ocean-Atmospheric Prediction Studies

Cooperative Institute for Tropical Meteorology

FSU Sensory Research Institute

Geophysical Fluid Dynamics Institute

Institute for Cognitive Sciences

Institute for Fishery Resource Ecology

Institute for the Study of Emotion

Institute of Molecular Biophysics

Institute on Napoleon and the French Revolution

Institute on World War II and the Human Experience

Middle East Studies Center

Statistical Consulting Center

Terrestrial Waters Institute

Winthrop-King Institute for Contemporary French and Francophone Studies

College of Business

Carl DeSantis Center for Executive Management Education

Center for the Advancement of Procurement

Center for Banking and Financial Institutions

Center for Information Systems Research

Center for Insurance Research

Center for Personnel and Human Resource Management

International Center for Hospitality Research and Development

Jim Moran Institute for Global Entrepreneurship

Marketing Institute

Real Estate Research Center

Small Business Institute

College of Communication

Florida Government Performance Survey Research Center

International Center for the Advancement of Political Communication

L.L. Schendel Speech and Hearing Clinic

College of Education

Center for Educational Research and Policy Studies

Center for the Study of Technology in Counseling and Career Development

Center for the Study of Values in College Student Development

Melvene Draheim Hardee Center for Women in Higher Education

College of Human Sciences

Center for Family Services (also under Institute of Science and Public Affairs)

Florida State University Family Institute

Center for Marriage and Family Therapy

Resource Materials Center

School of Information Studies

Information Use Management and Policy Institute

College of Law

Florida Dispute Resolution Center

College of Medicine

Center for Rural Health Research and Policy

Center of Excellence for Patient Safety

Center on Terrorism and Public Health

School of Motion Picture, Television and Recording Arts

Institute of Motion Picture, Television and Recording Arts

School of Music

Center for Music of the Americas

Center for Music Research

College of Social Sciences

Center for Civic and Nonprofit Leadership

Center for Demography and Population Health

Claude Pepper Center

DeVoe L. Moore Center for the Study of Critical Issues in Economic Policy and Government

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

School of Social Work

Center for Social Work Research and Practice

Institute for Family Violence Studies

Institute for Health and Human Services Research (also under Institute of Science and Public Affairs)

Traumatology Institute

Trinity Institute for the Addictions

Provost's Office

Institute for Academic Leadership

Research, Office of the Vice-President for

FSU Center for Health Equity

Other Instructional Units

Center for Professional Development and Public Service

Director: William H. Lindner

The Center for Professional Development (CPD) provides continuing education and other outreach activities locally, statewide, nationally, and internationally on behalf of The Florida State University. Activities include academic programs, professional programs, technical training and e-media services for lifelong learners. These activities are delivered face to face and via distance technologies. All of the center's programs and activities support its mission to extend the resources of the University to promote lifelong learning.

The center is housed in the Turnbull Building, which is located on the southeast edge of the campus, just six blocks from downtown. The Turnbull Building offers an auditorium, meeting rooms, and a dining room to facilitate meetings, workshops, and symposia for The Florida State University community. This facility provides state-of-the-art audiovisual equipment, access to teleconferencing, and an experienced continuing education staff. Continuing education coordinators assist with program development, budgeting, marketing, logistics, technical assistance, and on-site management.

Components of the Center

Academic Programs. In conjunction with the University's academic departments, CPD coordinates degree and certificate programs for non-traditional, part-time students—adults who cannot set aside job and family responsibilities but desire to further their undergraduate or graduate studies. These programs provide lunchtime, evening, and weekend classes that lead to degree completion at a pace that is comfortable for the part-time student. Programs can be found throughout Florida, from Pensacola to Jacksonville to Miami. A number of programs are delivered via distance technologies. In addition, credit classes which may count toward a degree program are made available in the workplace.

The center administers **Returning Student Services** to assist non-traditional students. Services range from advising and registration to information about childcare and financial aid. The center sponsors several tuition scholarships for returning candidates. CPD also serves as a test site for the State University System Independent Study by Correspondence Program.

Professional Programs. CPD develops, promotes, and administers a wide range of noncredit programs and certifications via both traditional classroom settings and online. Lifelong learners can remain current in their fields and maintain licensing and Continuing Education Unit (CEU) requirements by accessing CPD's instructor-led and online course offerings. (One CEU is defined as ten [10] contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction. The Office of the University Registrar records and maintains CEUs on a permanent, confidential transcript that can be issued at the request of the participant.) The center provides synchronous and asynchronous online learning opportunities that make it possible for adult learners to study and learn in the comfort of their homes or offices.

The professional programs unit focuses on career skills development, personal enrichment, and health and fitness offerings. Examples of current courses include the following: Certified Financial Planner Online (in conjunction with the College of Business); Continuing Legal Education Online (in partnership with the Florida Bar and the College of Law); Seminole Fitness; Test Preparation; Business Management; and Critical Writing.

Technology Training. CPD's technology training unit offers the latest in industry certified training programs that can be customized to individual learner or employer needs. Technical training course offerings may include Oracle, FSU certified webmaster, Linux, MCSE, and A+ certification. Classes are offered at the Turnbull Center and in Panama City, Florida. CPD also delivers technical training at a client's workplace or site with experienced teachers and technicians.

E-media Services. The e-media services unit of the Center for Professional Development works with clients within and outside the University to develop and disseminate comprehensive and customized educational programs. Their web-based media services include the following: information and database designs; user interfaces for online professional development and credit programs; and online registration, payment, and course evaluation tracking systems.

The Center for Intensive English Studies (CIES). 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. CIES also provides English-as-a-second-language services for the spouses of regular students at The Florida State University as well as for some already admitted international students who are experiencing difficulty in mastering the English language. *Center for Intensive English Studies, 918 West Park Avenue, The Florida State University, Tallahassee, FL 32306-4170*. Phone: *(850) 644-4797*. E-mail: *cies@mailer.fsu.edu.*

Anyone interested in obtaining further information regarding the Center for Professional Development's services or programs should contact the *Center for Professional Development, The Florida State University, Tallahassee, FL 32306-1640*. The center's website can be accessed at *http://learningforlife.fsu.edu*. Phone: *(850) 644-3801*.

The Florida Center for Public Management

Interim Director: James R. Anderson, Jr.

The Florida Center for Public Management (FCPM) was established in 1978 to provide assistance to elected leaders and appointed officials of 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 management development, organizational improvement, survey research, quality analysis, and the Certified Public Manager Program. As such, FCPM complements the public service and research mission of the University while supporting the academic mission of instruction through the use of undergraduate and graduate students in applied settings for enhanced learning.

To obtain further information about FCPM and its services, write or call: *The Florida Center for Public Management, The Florida State University, HMB 102, Tallahassee, FL 32306-2821. (850) 644-6460.*

Learning Systems Institute

Director: Laura B. Hassler
Associate Director: Tristan Johnson

The Learning Systems Institute is a multi-disciplinary research and development unit dedicated to improved human performance. For over thirty years the Learning Systems Institute (LSI) has been a recognized world leader in applying instructional systems design (ISD) in school, business, industry, and military settings. Over the thirty-year period, the Learning Systems Institute has brought more than $130 million in externally funded research to The Florida State University, 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.

There are several areas of research that serve as the current focus for LSI:

1. K–20 education research and development with an emphasis on reading;
2. Needs assessment and planning;
3. Improvement of training and learning through distributed learning and other technologies;
4. The study of expertise;
5. International development through improved learning systems; and
6. Change management.

To obtain further information about LSI, contact *Learning Systems Institute, 4600 UCC, Tallahassee, FL 32306-2540, (850) 644-2570.* The institute's website may be accessed at *http://www.lsi.fsu.edu*.

Office for Distributed and Distance Learning

Director: Lawrence C. Dennis
Associate Director: Sandra H. Calhoun
Main Office: *(850) 644-8004*

The Office for Distributed and Distance Learning (ODDL) supports online teaching and learning for the Florida State University community, and assists faculty in their pursuit of instructional excellence. ODDL supports on-campus students in enhancing learning through course websites, as well as distance students in completing courses and degree programs via technology; and aiding faculty in advancing the design, delivery, and assessment of classroom and web-based instruction. See *http://online.fsu.edu* for detailed information.

Student Support

ODDL provides graduate students:

- Online support for navigating course websites and using the electronic campus
- Online resources for improving academic performance
- Web pages dedicated to online degree programs

If you need support in using the University's electronic campus or a course website, instruction and solutions are available online at *http://online.fsu.edu/student* or via e-mail at *problems@campus.fsu.edu*.

Note: if you are enrolled in an online program and need help with general University business, including registration and financial aid, contact the department, office, or unit that serves on-campus students.

All graduate online courses supported by ODDL are developed and administered under the direction of University faculty members to ensure the same standard of quality pertaining to on-campus offerings. Students in online courses and programs earn the same course credits and degrees as those earned in on-campus courses and programs.

Master's programs available online include criminology (major in criminal justice studies); educational leadership; information studies; instructional systems (major in open and distance learning); mathematics education; mechanical engineering; management (a major in risk management/insurance); social work; and business administration.

For more information on online courses and programs, contact an inquiry specialist at *(850) 644-0393* or via e-mail at *inquiries@oddl.fsu.edu.*

Faculty Support

Electronic campus support. Faculty integrating a course website into an on-campus class or teaching an online course may receive comprehensive support from ODDL in developing, delivering, and managing an online environment. The University has developed one of the most advanced and easy-to-use electronic campuses in the country.

Online teaching workshops for faculty:

- Developing and managing course websites
- Teaching via the Web
- Customized workshops for departments

Online teaching services for faculty:

- Planning, designing, and managing course websites and enhancing face-to-face courses with web support
- Creation and conversion of fully online courses
- Ongoing problem solving and support
- Applications development

Online teaching and learning resources:

- Technical support at *http://online.fsu.edu/onlinesupport*
- Learning resources at *http://online.fsu.edu/learningresources*

For more information, contact the following: Mike Barker, *644-8004, mbarker@oddl.fsu.edu;* John Braswell, *644-8004, jbraswell@oddl.fsu.edu;* or Kyle Stierwalt, *644-8004, kstierwalt@oddl.fsu.edu.*

Instructional development services. Faculty can further their planning, teaching, and technology skills through workshops and individual consultation offered by Instructional Development Services (IDS). IDS also assists graduate teaching assistants in improving their academic leadership and teaching skills.

Instructional services programs:

- Faculty Support: Consults with full-time faculty and offers classroom observation to enhance instruction and integrate technology
- Program for Instructional Excellence (PIE): Assists graduate teaching assistants in academic leadership and teaching skills
- Preparing Future Faculty (PFF): Prepares graduate students who anticipate careers in academe through mentoring opportunities with educators and administrators

Instructional services resources:

- Instructional services and contacts at *http://online.fsu.edu/instructor/teachingenhancement*
- Reference materials on college teaching, higher education, and use of technology in the classroom
- Camcorders available for instructional analysis

For more information, contact the following: Walt Wager, *644-8004, wwager@oddl.fsu.edu;* Cheryl Stratton, *644-8004, cstratton@oddl.fsu.edu;* or Michelle Chandrasekhar, *644-8004, mchandrasekhar@oddl.fsu.edu.*

Digital media production. Faculty who are enhancing online teaching and learning through multimedia are supported by the Digital Media Production Group (DMPG), with services ranging from producing online course components to promoting student recruitment and image awareness for distance degree programs.

Digital media services include:

- Website design and webcasting
- Digital audio and video production and streaming
- Graphic design, animation, digital imaging and photography, and design and layout of print media
- Developing interactive CD-ROMs

Digital media resources:

- Online request form at *http://online.fsu.edu/instructor/digitalmedia*
- Searchable image database

For more information, contact the following: Joanna Southerland, *644-8004, jsoutherland@oddl.fsu.edu*; or Dave Simpson, *644-8004, davesimpson@oddl.fsu.edu.*

External relations and development. Faculty interested in finding external funding for instructional technologies projects are assisted by the External Relations and Development staff. The staff also seeks strategic partnerships with community colleges and other educational institutions. For more information, contact Carol Hayes, *644-8004, chayes@oddl.fsu.edu.*

Assessment services*:* Faculty and graduate students may receive support for testing, evaluation, and scan reporting needs through Assessment Services (AS). AS also schedules and administers a variety of national, state, and course-related examinations.

Services provided:

- Mark-sense scanning and test scoring and reporting
- Scoring and reporting University and department faculty evaluation instruments (SUSSAI, e-SUSSAI, SIRS)
- Scheduling, administration, and reporting of computer-based, internet-based, and paper-based tests
- Technical support for data collection and reporting for faculty and student research

For more information, contact Bonnie Armstrong, *644-8004, barmstrong@oddl.fsu.edu.*

Institute for Cognitive Sciences

Acting Director: Dr. L. J. Kohout

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 dif-

ficulties 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.

L. L. Schendel Speech and Hearing Clinic

Director: Dr. Juliann Woods

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 to accomplish one goal: the enhancement of the communicative well being of the clients served.

The Florida State University Center for the Performing Arts

Director of the Conservatory for Graduate Actor Training: Gilbert N. Lazier

The Florida State University Center for the Performing Arts, located in Sarasota, Florida, is owned and managed by the University to support its graduate acting program. The center also houses the Asolo Theater Company, a professional theatre, and its costume studios. 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.

Libraries

The Florida State University libraries are the intellectual center of the University, providing students, faculty, and staff with virtual and physical resources and services to facilitate learning, teaching, and research. The Florida State University libraries include the Robert Manning Strozier Library (the main library), the Paul A.M. Dirac Science Library, the Mildred and Claude Pepper Library, the Harold Goldstein Library, the Warren D. Allen Music Library, the Law Library, the College of Medicine Medical Library, and the Career Center Library. Library materials and services also are available at The Florida State University's off-campus sites, including the Ringling Museum of Art, the Panama City campus, and the study centers in London, Florence, and the Republic of Panama.

The libraries support the University's educational and research missions through extensive collections and a wide range of services available to the campus community and to distance learners virtually and in person. The libraries' resources include more than 2,500,000 books and periodicals, over 928,000 government documents, more than 9,000 films, videos, and DVDs, and over 6,795,000 microforms. Access to over 250 subscription databases, 54,000 e-books, and more than 14,000 electronic journals covering a wide variety of subjects is available from offices, residence halls, homes, and other remote locations, as well as in the libraries. The online catalog is available on the library's website, and provides access not only to the University's collections, but also to those of the other ten state universities. Worldwide information resources are available readily through the Internet. Access to materials and resources not held in the University's collections is available through interlibrary loan and document delivery.

Members of the library staff assist students, faculty, and staff in making the best use of information resources by providing research guidance and information assistance, offering one-on-one instruction and instructional classes, and developing research guides. Professional research assistance is available via the Internet, by telephone and in the library.

A state-of-the-art media center provides equipment and facilities for listening to or viewing multimedia materials. The libraries provide Internet-accessible computers, printers, and photocopiers for convenient use. Additional computers for research and word-processing are available in a student computer center located in Strozier Library. Adaptive equipment and software for students with disabilities also are available.

The library is a member of the Association for Research Libraries (ARL), the Center for Research Libraries (CRL), the Research Libraries Group (RLG), and the Association of Southeastern Research Libraries (ASERL).

The **Robert Manning Strozier Library**, the University's main library, is located strategically in the center of the main campus and occupies seven floors. 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. Its Special Collections Department includes rare and unique materials for research and study. The library's website is located at *http://www.fsu.edu/library.*

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 website is located at *http://www.fsu.edu/library/dirac/index.shtml.*

The **Mildred and Claude Pepper Library** contains the personal and professional papers and mementos of one of Florida's best-known political couples. Reconstructions of United States Congressman Pepper's Senate and House offices are in the building. Log on at *http://pepper.cpb.fsu.edu/library/default.htm* for more information.

The **Warren D. Allen Music Library**, located in the School of Music, contains a collection of recordings, scores, books and periodicals that support the school's curriculum. The library's website is located at *http://otto.cmr.fsu.edu/~library/home.html.*

The **Harold Goldstein Library**, located in the School of Information Studies, contains a collection of professional library science materials and reference materials, as well as juvenile materials and picture books. Visit *http://goldstein.lis.fsu.edu* for more information.

The **Law Library**, operated and directed by the College of Law, has a collection containing over 440,000 volumes and volume equivalents, and approximately 5,000 subscriptions. Legal research is complemented by an array of electronic databases, including the LEXIS and WESTLAW legal research databases. Log on at *http://www.law.fsu.edu/library* for more information.

The **College of Medicine Medical Library** provides access to a number of electronic medical databases and a growing collection of books and journals. Visit *http://www.med.fsu.edu/library/* for more information.

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. It contains more than 60,000 books, auction catalogs, and other materials supporting art-related research. Special collections contain circus history items including John Ringling's original collection of more than 600 books. The library's website is at *http://www.ringling.org.*

Panama City Campus library services are provided to students, faculty, and staff at that location through an arrangement with Gulf Coast Community College (GCCC). Florida State University's books and journals are housed at GCCC Learning Resource Center, and electronic resources access is available onsite at the campus. An onsite librarian assists users who also may contact campus libraries.

Graduate Education

Dean of Graduate Studies and Associate Vice President for Academic Affairs: Dianne F. Harrison, *408 Westcott Building*

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

The Dean of Graduate Studies has University-wide responsibility for the quality of graduate education. The graduate policy committee, a fac-

ulty 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 and schools administer their individual graduate programs.

The Office of Graduate Studies assists graduate students in academic matters, offering advice on University-wide degree requirements, thesis and dissertation format, procedures for changing programs, and availability of assistantships, fellowships, and scholarships.

There are approximately 6605 graduate and law students enrolled at The Florida State University. These students come from approximately 132 foreign countries and all fifty states.

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, social work, business, governmental affairs, population studies, public administration, and law are often funded by federal grants and supported by international organizations and have ready access to state government information.

Graduate Life

Located in the center of Tallahassee, the state capital, The 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. For those who enjoy sports, many of the University's intercollegiate athletic teams regularly rank nationally.

Faculties

It is the official policy of The Florida State University to recruit the most talented faculty from leading centers of learning throughout the world. The University faculty has included five Nobel laureates and ten members of the National Academy of Sciences. 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 complete listing appears in the back of this *Graduate Bulletin*.

Affiliations

The University participates in the Traveling Scholar Program, Academic Common Market, and Cooperative Programs within the State of Florida, Division of College and Universities system. The 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

The Florida State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (*1866 Southern Lane, Decatur, Georgia 30033-4097*: Telephone number *404-679-4501*) to award associate, bachelor's, master's, and doctor's degrees. For departmental/field accreditations, refer to the respective college or schools chapter in this *Graduate Bulletin.*

Carnegie Foundation Classification

The Carnegie Foundation, in its 1994 report, ranked The Florida State University in the Research Universities I category, its highest category for a graduate-research university. The Florida State University is one of eighty-nine American universities to have earned this designation at that time.

RESEARCH FACILITIES AND SPECIAL PROGRAMS

Research and Research Facilities

Since its designation as a university in 1947, The Florida State University has built a reputation as a strong center for research in the sciences, the humanities, and in the arts. During fiscal year 2002, The Florida State University faculty generated $147.9 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 The Florida State University faculty are renowned scholars in their fields. In the natural sciences, The Florida State University is perhaps best known for its basic research programs in physics, nuclear science, chemistry and biochemistry, biology, psychology, meteorology, and oceanography. Its programs in geology, mathematics, computer science, and statistics also have strong research components, both basic and applied. The University also has a joint program in engineering with Florida Agricultural and Mechanical University (FAMU) in Tallahassee.

For the urgent preservation of Florida's beaches, a combined study of storm surge impact, the history and projected future of hurricanes, and shore characteristics—and the resultant erosion—is conducted by the **Beaches and Shores Resource Center**. The center contracts with the Florida Department of Environmental Protection to furnish the scientific underpinnings for the Florida Coastal Construction Control Line, an attempt to contain burgeoning beach development by setting construction projects back from the water's edge.

Structural Biology, a collaboration of the University's Departments of Chemistry and Biochemistry, Physics and Biological Sciences, is a 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. Grants from the National Science Foundation, National Institutes of Health and the Markey Charitable Trust enabled the recent acquisition of state-of-the-art facilities including X-ray crystallography, cryoelectron microscopy, computer-based molecular modeling, bioanalytical sequencing/synthesis and NMR, electron paramagnetic resonance, laser and fluorescence spectroscopies. Graduate students working under Structural Biology faculty can enroll in either the molecular biophysics (MOB) PhD program or in the graduate programs of chemistry or biological science.

Essential to geological investigation is the preservation of the sediment collected on research expeditions. One of the largest deep-sea sediment cold storage facilities, the **Antarctic Research Facility**, is located at the University. The facility, holding more than 10 miles of Antarctic core samples, operates as a worldwide resource for scientists both on campus and throughout the world.

The **Geophysical Fluid Dynamics Institute** provides a focus for theoretical and experimental studies of dynamical processes in the atmosphere, oceans, and the interior of the Earth and other planets, conducted by faculty and students in applied mathematics, dynamic meteorology, engineering, geology, geophysics, and physical oceanography. The institute's experimental facilities include a well equipped fluid mechanics laboratory, an electronics development laboratory, a precision machine shop, a water flume, several precision rotating turntables including a unique rotating annulus to simulate the general circulation of the atmosphere.

All aspects of child behavior and learning are researched in the **Educational Research Center for Child Development**. The center, a model for other national early educational research centers, provides a research site and laboratory setting in which faculty and graduate students may observe and work with young children.

Research needs in Florida in the areas of health and human services are accommodated by the **Institute for Health and Human Services Research**. This institute currently is affiliated with the School 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 The Florida State University for both research and instruction. A high speed computer network reaches throughout the campus and connects the University to the Internet. The Florida State University also participates in Internet 2, which provides access to a special high capacity national network for academic purposes. **Academic Computing and Network Services (ACNS)** provides free accounts for computer and Internet access to all students, faculty, and staff. ACNS also operates general purpose computing servers and supercomputers that are available to the entire campus, and provides open-access computer laboratories for students. For more information, see *http://www.acns.fsu.edu.*

Special Programs in Research

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

The **National High Magnetic Field Laboratory,** which opened in 1994, is one of the nation's newest research laboratories and 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.

Under the guidance of the laboratory's chief scientist, Nobel Laureate Robert Schrieffer, 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 magnet of its kind in the world. The National High Magnetic Field Laboratory has many exciting research opportunities for graduate students who wish to pursue research at the edge of parameter space in any area of science utilizing these world-class resources and instrumentations.

The Florida State University has established an interdisciplinary **School of Computational Science and Information Technology (CSIT)** to support graduate education and research, to provide a leading-edge high-performance computational facility, and to contribute to a high level of computational culture beneficial to the nation and the state.

CSIT embraces all of the possible inferences drawn from its name: its scope includes the science and technology of performing, analyzing, and archiving large-scale computations over wide-area networks, and its goal is to employ large-scale computer and network resources in pursuit of scientific and technological research goals. Both the tools and content of computational science are embraced by the educational mission of the school.

The **Computational and Information Science Laboratory (CISL)** provides the infrastructure for the interdisciplinary research and education programs. Through the acquisition and maintenance of the state-of-the-art computing, visualization, and high-bandwidth network connections to other major national centers, the laboratory

provides support for The Florida State University's existing and future user-base of large-scale high-performance computing. A user services staff proactively inculcates a high-performance computing culture through consulting services and short courses.

The **Center for Materials Research and Technology (MARTECH)** is a collaborative program in materials science involving members of the University's physics, chemistry and biochemistry, biology, and engineering departments. The center's rapidly expanding facilities include several thin-film preparation labs, a light-scattering facility, a fast Fourier Transform Far Infrared spectrometer laboratory, facilities for fabricating nanostructured materials, including a clean room, photo- and electron-beam lithography, extensive surface analysis equipment including XPS, helium-scattering and scanning probe microscopy and equipment for the study of electrical transport and magnetic as well as superconducting properties of complex materials.

The **Program in Nuclear Research** enjoys a high national ranking and emphasizes nuclear structure physics; radioactive beam studies; studies of nuclear reaction mechanisms using polarized Li beams; accelerator based atomic physics; electron scattering; and relativistic heavy ion reactions. A large part of the program in experimental nuclear physics and atomic 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 which injects into a heavy-ion superconducting linear accelerator. The facility utilizes state of the art instrumentation and provides forefront nuclear research capability, and is unique in the southeast.

The **Institute for Molecular Biophysics** is recognized as a national leader in basic, interdisciplinary research in biochemistry and physical chemistry. A large effort based in the IMB is its Program in Structural Biology, begun in 1990. The primary research focus of this group is the elucidation of the three-dimensional structures, functional properties, and assemblages of biological macromolecules using biophysical techniques (e.g. X-ray crystallography, cryoelectron microscopy, electron diffraction, computational modeling, EPR and NMR spectroscopy).

The **Florida State University Marine Laboratory** is located 45 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. The **Academic Diving Program**, which is part of the laboratory and is located on the main campus, provides support for and oversight of all scientific and educational compressed-gas diving conducted under the auspices of The Florida State University. The Academic Diving Program also teaches or co-teaches courses in scientific diving methods for biologists and archaeologists, and teaches courses and workshops in SCUBA, from basic through instructor, as well as a number of diving specialties including dry-suits, underwater photography, full-face mask and helmet diving, and techniques for underwater search and recovery for public safety divers.

The **Cooperative Institute for Tropical Meteorology** was created in 1993 through a partnership between The Florida State University and the National Oceanic and Atmospheric Administration (NOAA), the parent agency of the National Weather Service. The Institute brings together faculty at the University with research and operational meteorologists at forecast offices throughout the southeastern United States and Puerto Rico. Faculty also work with scientists at the National Center for Environmental Prediction in Washington, D.C. and the National Hurricane Center in Miami. Taking advantage of one of the historical strengths of the Department of Meteorology, faculty, students, and researchers outside of the University benefit from the many interactions produced as a result of the Institute.

The **Center for Ocean-Atmospheric Prediction Studies**, located at the Don Fuqua Research Complex at Innovation Park, trains oceanographers and meteorologists in research focusing on the impact of tropical and mid-latitude ocean dynamics on global weather patterns. COAPS scientists specialize in climate prediction on scales of months to decades, air-sea interaction and modeling, and predictions of socio-economic consequences of ocean-atmospheric variations.

The **Center for Music Research** (CMR) exists to foster research and publication and provides a support system for graduate education, faculty and student research, post-doctoral study, and occasional workshops, symposia, and visiting scholars. The aims include developing new knowledge about music, music education, music therapy, and related areas through scholarly inquiry. Research programs in all music phenomena are encouraged and include the following: music perception and cognition, music skill acquisition, music listening, music and emotion, music acoustics and psychoacoustics, instructional techniques, music education and therapy applications, pedagogy and other topics.

The **John and Mable Ringling Museum of Art** located in Sarasota, Florida, is the designated State Museum of Florida. Recently the Legislature shifted administration of the museum to The 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 new association with the Sarasota community due to mutual strengths in the areas of the fine and performing arts and corrollary 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, Ca'd'Zan, the Ringling Mansion, and the Circus Museum. Together with The Florida State University Performing Arts Center, which lies adjacent to the art museum, it holds center stage for The Florida State University Ringling Center for the Cultural Arts which was created by the Florida Legislature in the year 2000.

The Florida State University **Institute of Science and Public Affairs** is a multifaceted institute of public service and applied research which helps government and private agencies solve problems ranging from hazardous waste disposal to conflict resolution.

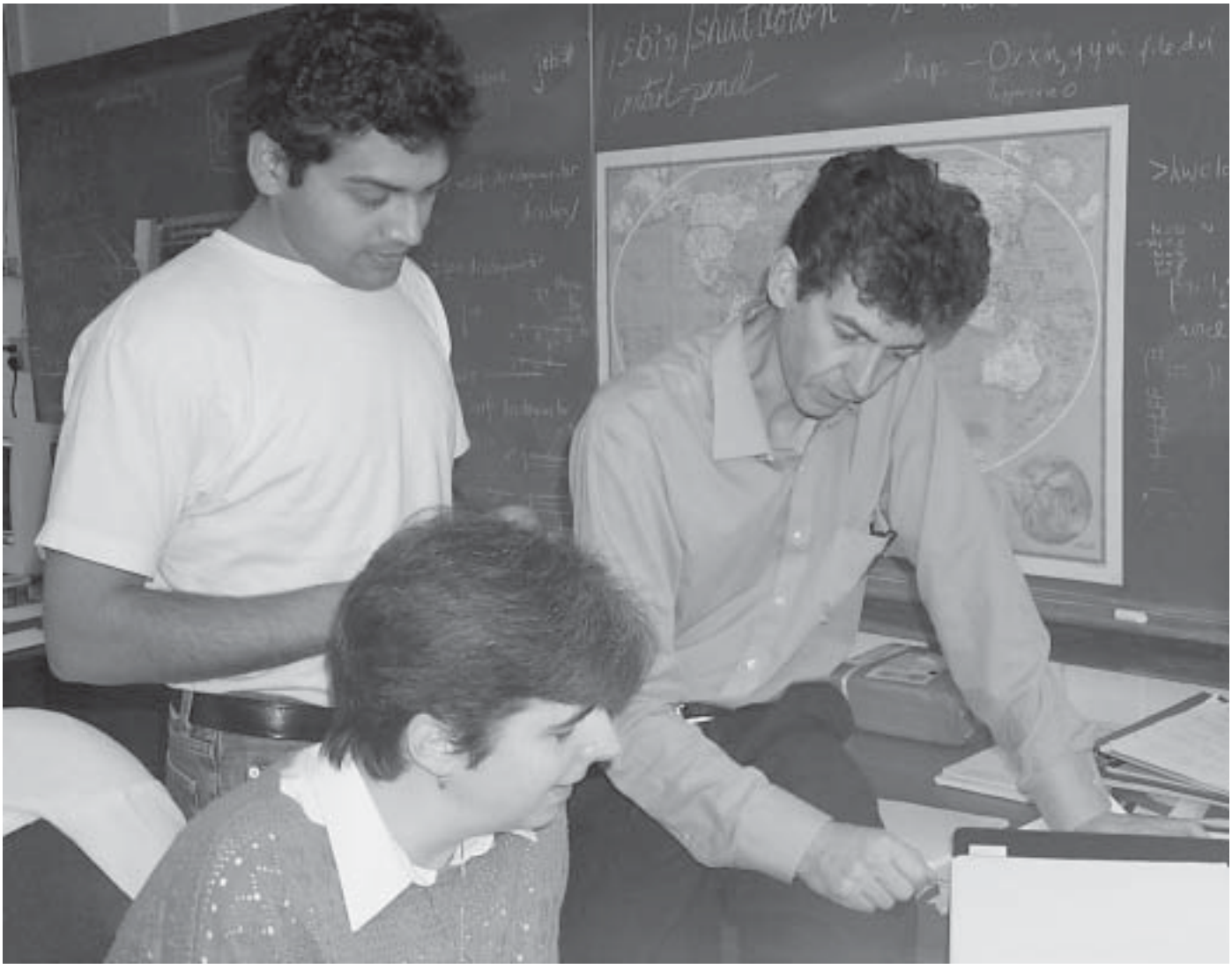
Research centers within the institute are designed to respond to public and private sector needs. Specialists in the fields of biology, chemistry, geography, education, planning, public administration, physics, economics, law, and other areas carry out the University's public service responsibility through 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 The Florida State University have benefited from its membership in **Oak Ridge Associated Universities (ORAU)**. ORAU is a consortium of eighty-seven colleges and 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, as well as 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. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the *Resource Guide*, which is available on the World-Wide-Web at *http://www.orau.gov/orise.htm*, or by calling either of the contacts below. ORAU's Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU's members, private industry, and major federal facilities. Activities include faculty development programs, such as the Junior Faculty Enhancement Awards and the Visiting Industrial Scientist Program, and various services to chief research officers. For more information about ORAU and its programs, contact *Dr. Raymond E. Bye, Jr., ORAU Council Member,* at *850-644-*

3347; contact *Monnie E. Champion, ORAU Corporate Secretary,* at *423-576-3306*; or the ORAU Home Page at *http://www.orau.gov.*

A long-time member of the Southeastern Universities Research Association, The Florida State University also is a new member of a seven-university consortium, headed by the University of Tennessee, that serves as an advisory group to the new managers of the Oak Ridge National Laboratory (ORNL). The group's mission is to work with ORNL's new not-for-profit management company, UT-Battelle, to set scientific and engineering research priorities for ORNL. The Florida State University joins UT, the University of Virginia, Virginia Tech, Duke University, Georgia Tech and North Carolina State University in this capacity.



INTERNATIONAL PROGRAMS

International Commitment

The Florida State University recognizes that a great university ideally builds and extends its service, its potential for research, 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 our 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 urgent that the teaching, research, and service of The 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 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 The Florida State University students who have studied overseas play an important role.

To accomplish these goals, The Florida State University encourages and seeks students from abroad for its undergraduate and graduate programs, 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.

The 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

Coordinator: Roberta Christie, International Center

Beyond Borders is a university-to-university exchange program that provides opportunities for students to engage in intensive, short-term, intercultural experiences while performing community service. Currently, The Florida State University has exchanges with the University of Costa Rica, Atlantic Branch (Turrialba, Costa Rica), and the University of the West Indies, Mona Campus (Kingston, Jamaica). Participants live with local families or in university facilities and serve as volunteers in projects organized by the host institutions which also arrange for housing and most meals. Air travel, required health insurance, special trips, and some administrative costs are paid by participants. All Florida State University students are eligible to apply; groups are limited to 10-12 students. *107 South Wildwood, Tallahassee, FL 32306-4240; (850) 644-1702; rchristi@admin.fsu.edu; http://www.fsu.edu./~fsuisc.*

International Programs

Director: James E. Pitts;
Associate Director: Michele E. Ceci;
Academic Administrators: John B. Brennan, Joan W. Cassels

The Florida State University offers a wide variety of opportunities for students to study overseas, both during the regular academic year and in special summer programs. Students learn not only from their exposure to the cultural resources of the host countries but also through their first-hand observations and participation in the political, economic, and social changes taking place outside the United States.

Further assistance in applying for any of these programs may be obtained by writing or calling *International Programs Office, A5500 University Center, Tallahassee FL 32306-2420. (850) 644-3272, (800) 374-8581*. Fax (*850) 644-8817*. Email: *intprog@www.fsu.edu*. Website: *http://www.international.fsu.edu.*

Year-round Programs

Republic of Panama/Florence/London/Valencia

Director, International Programs: James E. Pitts; *Florence Resident Director*: Victor Carrabino; *London Administrative Director:* Mary Balthrop; *Valencia Administrative Director:* Ignacio Messana; *Valencia Academic Director:* David Nordlund; *Panama Director:* Jeremy Brown

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 Valencia, Spain, since 2000. The FSU—Panama campus has operated through The Florida State University since 1957. At each of these locations, the Florida State University faculty and approved adjuncts conduct liberal studies as well as specialized courses during each of the Fall, Spring, and Summer semesters. The centers are open to students from all state universities in Florida as well as other U.S. institutions.

All of these year-round centers offer courses which enable students to make normal progress toward their chosen degrees. In Florence, the courses usually offered are in the areas of art history, classics, English writing and literature, history, the humanities, Italian language, and politics. Students also may complete an interdepartmental Italian Studies Florence Center minor. The London center offers courses in the areas of art history; education, English literature, history, music, politics, social sciences, theatre, and select areas which fulfill some general studies area requirements. The School of Theatre also offers a *Theatre Experience* program for majors. The Department of Art History co-sponsors programs in *Museum Studies* in London and Valencia. There are numerous internships available. Students may also complete an interdepartmental British Studies London Center Minor. In Valencia, courses are offered in English literature, the humanities, music, Spanish language, literature and civilization, and select areas which fulfill some general studies area requirements. Internships are available for a variety of majors. Courses in Valencia are taught by The Florida State University faculty and approved local adjuncts. Courses in Florence and London are taught by regular faculty and instructors from the State of Florida, Division of Colleges and Universities, and approved local adjuncts. For further information on the British Studies or Italian Studies Minors, refer to the "Academic Departments and Programs" chapter of this *Graduate Bulletin*. Internships and research opportunities are available.

Summer Programs

San Jose, Costa Rica

During the summer in Costa Rica, students live with selected Costa Rican host families. Classes are taught by Florida State University faculty supplemented by approved Costa Rican adjunct faculty. Courses generally cover Spanish language, literature and civilization; history of Mexico, Central America and the Caribbean; business; and politics.

Dubrovnik, Croatia

Thirty years ago, The Florida State University established an educational link with the then-Yugoslavia to forge further understanding of a rapidly evolving Southeast Europe. This linkage has changed with the dynamics of the democratic region, and is now an ongoing summer program in the coastal city of Dubrovnik, Croatia. On the program, students will explore the topics of politics, culture, and transition through coursework and excursions in and around the region. Studies will be based at the historic Inter-University Centre.

Prague, Czech Republic

The Florida State University offers a summer program in Prague. Course offerings vary and cover a broad range of academic areas including comparative criminal justice; comparative politics; history and culture; and hospitality administration. Typical cultural excursions have included Cesky Krumlov, south of Prague, and Krakow and Auschwitz in Poland.

Oxford, England

Students experience the Oxford tradition of small tutorial/seminar groups taught by British faculty in this program offered in concert with the Oxford University Department for Continuing Education and Christ Church College. Participants live and work on campus in Christ Church Oxford, a college founded in 1546, and take their meals in its majestic dining room. They enjoy field trips in and around Oxford and have access to the Ashmolean Museum and the world-renowned Bodleian Library.

Paris, France

This program offers courses that typically include elementary, intermediate and advanced language; contemporary French culture, and civilization; art history and English writing and literature courses. Courses will be taught by Florida State University faculty and approved local adjuncts.

Munich, Germany

This session takes place within the rich artistic culture of Bavaria's historical capital. Course offerings vary and include courses which fulfill some general studies area requirements. Faculty include both Florida State University professors and approved adjuncts. Course-related trips have included country castles in the Alps, monastic houses (e.g. Ettal), Oberammergau; Salzburg, Austria; and cultural events within Munich.

Accra/Kumasi, Ghana

In cooperation with the Institute of African Studies at the University of Ghana, Legon, The Florida State University offers an intensive program. Students will have the opportunity to sensitively conduct photography projects within the atmosphere of Africa's urban culture. This workshop will include class work examining the various approaches used to photograph people and culture while exercising knowledge and sensitivity. Students also will be offered a course in West African aesthetics among the Ga and Ashante peoples of Ghana.

Chalkidiki, Greece

Led by Florida State University faculty, studies in this summer program generally include courses in art history, classics, literature, and humanities. In the past, this program has included visits to Thessaloniki, Mount Olympus, Petralona, Mount Athos, and Athens. The program also incorporates a study cruise to various areas of classical cultural significance. Previous destinations have included ancient Ephesus, Rhodes and Crete.

Dublin, Ireland

Housed within the prestigious Trinity College, this summer program gives students the opportunity to take courses taught by distinguished Florida State University and University of Dublin faculty. Courses focus on Irish life and culture, humanities, theater, and history. The program typically includes an introductory exploration of the city and its surroundings. Longer course-related field trips are made; typical destinations may include Galway, the Aran Islands, and prehistoric New Grange.

Tokyo, Japan

Topics to be covered in this, our newest program, include the marketing of goods and services both intra-nationally and across borders. Based at Nihon University in Tokyo, one of the top business schools in Japan, the program has been developed for business majors and economics majors. Other related majors may be considered if prerequisites are met. Students will engage in day trips to popular sites such as Kamakura, Mount Fuji, the Tokyo Stock Exchange and the Diet.

Moscow, Russia

This program is based in Moscow with a program enhancement excursion to St. Petersburg. Students are housed in and take classes at Moscow State University. Courses are taught by Florida State University faculty and approved faculty from Moscow State University. No previous knowledge of Russian is required. Language classes are offered for beginning through advanced students. Other courses include Russian literature, culture, and civilization.

Cape Town, South Africa

The broad selection of courses taught by Florida State University faculty is enhanced by the expertise of South African artists, professionals, and professors in the fields. The study program is affiliated with and uses the facilities of the University of the Western Cape. The program also includes an excursion to Johannesburg, the primary business, art, and cultural center of South Africa.

Seoul, South Korea

Students will live and learn in modern facilities at Chugye University for the Arts, in central Seoul. The university's focus on contemporary as well as time-honored Korean arts such as brush painting, Korean opera, and traditional music ensures a rich exposure to Korean art and culture. Professors and artists from this prestigious institution will take part in instruction, giving students rare insight into Asian perspectives and techniques.

Leysin, Switzerland

A summer offering since 1970, this program offers both hospitality administration majors and interested non-majors the opportunity to explore the heartland of Europe's hospitality and tourism industry. The program offers students an ideal educational balance of lectures, seminars, and on-site industry observations. The student's experience will be enhanced by travel to nearby destinations.

Port of Spain, Trinidad and Tobago

One of our newest international offerings, Trinidad offers a spectacular tropical environment. Students will gain much from courses in the social sciences and international relations, with an emphasis on the Caribbean. Courses are taught through the cooperative efforts of The Florida State University and the University of the West Indies, St. Augustine Campus.

Ho Chi Minh City, Vietnam

This summer program gives students the opportunity to take humanities, music, language, and interdisciplinary social science courses in the heart of Southeast Asia's evolving economy. Students will take weekend and day trips around the country, enhancing their studies and gaining a new perspective of one of the world's least-known and most unspoiled nations.

For further information on any of the Summer programs, contact the *International Programs Office, A5500 University Center, 32306-2420. (850) 644-3272, (800) 374-8581*. Fax *(850) 644-8817*. E-mail: *intprog@www.fsu.edu*. Website: *http://www.international.fsu.edu.*

Law Program at Oxford

The 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. The program is available to students in good standing at an ABA-approved law school who have completed at least one year of study. Website: *http://www.law.fsu.edu/academic_programs/international_law.*

Specialized Summer Programs

In addition to specific offerings to students of law, The Florida State University offers a rapidly expanding selection of specialized study programs. These programs are special interest, major-oriented programs. London, England, hosts the majority of these programs, with Valencia, Spain, being the second most popular site. In addition, a number of programs utilize multiple locations around Europe for their studies. A wide variety of special topics and areas of interest are represented. Historically, The Florida State University has offered programs with emphasis in such areas as social work, interior design, international affairs and many more. If you are interested in obtaining specific information about the specialized courses of study available this summer, please contact the International Programs Office, *A5500 University Center, 32306-2420; (850) 644-3272*; or consult our website: *http://www.international.fsu.edu.*

Other Programs

Archaeology Programs in Italy

Director: Nancy T. de Grummond

The Department of Classical Languages, Literature and Civilization conducts archaeological excavations at two Etruscan/Roman sites in Italy—Cetamura del Chianti, near Siena, and San Venanzo, near Orvieto. Each summer the department sponsors field schools of approximately six weeks at these sites. The field schools are open to students from colleges and universities throughout the state of Florida and constitute a significant part of the master's degree program with a concentration in classical archaeology. For further information, contact the Department of Classical Languages, Literature and Civilization, *205 Dodd Hall.*

Florida–Costa Rica Institute

Co-director: Joan Cassels

The 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 11 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 11 universities and 28 community colleges.

Florida–France Institute

Co-director: Joan Cassels

The Florida State University, the University of South Florida, 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 11 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, 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 11 universities and 28 community colleges with those of state government and business to forge a network of partnerships with French educational, governmental, and private-sector institutions.

ACADEMIC DEGREE AND CERTIFICATE PROGRAMS

The Florida State University offers degree programs through the following colleges and schools. Consult the college or school for currently active programs.

B — Bachelor's Degree M — Master's Degree
A — Advanced Master's S — Specialist
D — Doctoral Degree P — Professional

College of Arts and Sciences

Actuarial Science	B		
American and Florida Studies	B	M	
Anthropology	B	M	D
Biochemistry	B		
Biological Sciences	B	M	D
Chemical Physics		M	D
Chemical Science	B		
Chemistry	B	M	D
Classical Language and Literature			
Classics	B	M	D
Greek	B	M	
Latin	B	M	
Computer and Information Science	B	M	D
English	B	M	D
Geology	B	M	D
Geophysical Fluid Dynamics			D
History	B	M	D
Humanities	B	M	D
Latin American and Caribbean Studies	B		
Mathematics	B	M	D
Meteorology	B	M	D
Modern Languages:			
French	B	M	D
German	B	M	
Italian	B		
Italian Studies		M	
Russian	B		
Slavic		M	
Spanish	B	M	D
Molecular Biophysics			D
Neuroscience			D
Oceanography		M	D
Philosophy	B	M	D
Physics	B	M	D
Physics, Interdisciplinary	B		
Psychology	B	M	D
Religion	B	M	D
Secondary Science and/or Mathematics Teaching	B		
Statistics	B	M	D

Certificate in Advanced Scientific Computing (CSIT)
Certificate in American and Florida Studies
Certificate in Archival Studies (History)
Certificate in Elementary School Science
Certificate in Information Systems Security Professionals
Certificate in Marine Biology and Living Resource Ecology
Certificate in Museum Studies: Anthropology
Certificate in Museum Studies: Classics
Certificate in Museum Studies: History
Certificate in Performance Management (Psychology)
Graduate Certificate in Cognitive Science (Computer Science)
Graduate Certificate in Critical Theory (English)
Interdepartmental Certificate in Developmental Disabilities[1]

Undergraduate Studies, Division of

Associate in Arts Certificate

College of Business

Accounting	B	M	
Business Administration	B	M	D
Finance	B	M	
Hospitality Administration	B		
Management	B	M	
Management Information Systems	B		
Marketing	B	M	
Multinational Business	B		
Real Estate	B		
Risk Management-Insurance	B		

College of Communication

Communication Sciences and Disorders	B	M/A	D
Communication	B	M	D
Interdepartmental Certificate in Developmental Disabilities[1]			

School of Criminology and Criminal Justice

Criminology	B	M	D

Certificate in Corrections
Certificate in Law Enforcement
Certificate in Security Administration

College of Education

Adult Education		M/S	D
Comprehensive Vocational Education		S	D
Counseling and Human Systems		M/S	
Counseling Psychology and Human Systems			D
Early Childhood Education	B	M/S	D
Educational Leadership/ Administration		M/S	D
Educational Psychology		M/S	D
Elementary Education	B	M/S	D
Emotional Disturbances/ Learning Disabilities	B	M/S	
English Education	B	M/S	D
Foundations of Education		M/S	D
Health Education	B	M	
Higher Education		M/S	D
Instructional Systems		M/S	D
Mathematics Education	B	M/S	D
Measurement and Statistics		M/S	D
Mental Disabilities	B	M/S	
Multilingual/Multicultural Education	B	M/S	D
Physical Education	B	M/S	D
Reading Education		M/S	D
Recreation and Leisure Services Administration	B	M	
Rehabilitation Counseling	B	M/S	D
Research and Evaluation Methods		M/S	D
Science Education	B	M/S	D
Social Sciences Education	B	M/S	D
Special Education		S	D
Visual Disabilities	B	M/S	

Certificate in College Teaching
Certificate in Early Childhood/Special Education
Certificate in Educational Policy
Certificate in Educational Technology
Certificate in Human Resource Development
Certificate in Online Instructional Development
Certificate in Program Evaluation
Certificate in Teaching English to Speakers of Other Languages
Graduate Certificate in Museum Studies: Recreation and Leisure Services Administration
Interdepartmental Certificate in Developmental Disabilities[1]

FAMU—FSU College of Engineering

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
Mechanical Engineering	B	M	D

Certificate in Water and Environmental Resources Engineering

[1] Offered jointly by the College of Arts and Sciences, the College of Communication and the College of Education

College of Human Sciences

Clothing, Textiles and Merchandising	B	M	
Family, Child and Consumer Sciences	B	M	
Family and Consumer Sciences Education	B	M	
Food and Nutrition	B	M	
Human Sciences	B		D
Marriage and the Family			D
Movement Science		M/S	D

Certificate in Museum Studies: Textiles and Consumer Sciences

School of Information Studies

Information Studies	B		
Library and Information Studies		M/S	D

Certificate in Museum Studies: Information Studies

Interdisciplinary Programs

Aging Studies		M	
American and Florida Studies	B	M	
Asian Studies	B	M	
Health Policy Research		M	
Humanities	B	M	D
International Affairs	B	M	
Latin American and Caribbean Studies	B		
Marriage and the Family			D
Physics Interdisciplinary Program	B		
Russian and East European Studies	B	M	
Social Science	B	M	

College of Law

American Law for Foreign Lawyers		M	
Law			P

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

College of Medicine

Medicine			P

[1] Offered jointly by the School of Music and the School of Visual Arts and Dance

[2] Denotes dual degree program

School of Motion Picture, Television, And Recording Arts

Motion Picture, Television and Recording Arts	B	M	

School of Music

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

Certificate in Church Music
Vocal
Instrumental
Certificate in Computers in Music
Certificate in Early Music
Certificate in Jazz Studies
Certificate in Music of the Americas
Certificate in Performance
Certificate in Piano Pedagogy
Certificate in Piano Technology
Certificate in Special Music Education
Certificate in World Music
Music Therapy Equivalency
Graduate Artist Certificate in Performance (opera, piano, violin, viola, violoncello)
Graduate Certificate in College Teaching
Graduate Certificate in Pedagogy of Music Theory

School of Nursing

Nursing	B	M	

College of Social Sciences

Aging Studies		M	
Asian Studies	B	M	
Demography		M	
Economics	B	M	D
Geography	B	M	D
Health Policy Research		M	
International Affairs	B	M	
Political Science	B	M	D
Public Administration		M	D
Public Administration/Health Policy Research		M[2]	
Public Administration/Urban and Regional Planning		M[2]	
Russian and East European Studies	B	M	
Social Science	B	M	
Sociology	B	M	D
Urban and Regional Planning		M	D

Certificate in African-American Studies
Certificate in Aging Studies, Undergraduate/Graduate
Certificate in Demography
Certificate in Emergency Management
Certificate in Political Economy
Certificate in Public Administration, Undergraduate/Graduate
Certificate in Urban and Regional Planning, Undergraduate
Graduate Certificate in Health Services Administration and Policy
Graduate Certificate in Human Resource Management
Graduate Certificate in Public Financial Management

School of Social Work

Social Work	B	M	D

Certificate in Aging Studies
Certificate in Arts and Community Practice
Certificate in Child Welfare Practice
Certificate in Family Social Work Practice

School of Theatre

Theatre	B	M	D

School of Visual Arts and Dance

Arts Administration		M[1]	
Art Education	B	M/S	D
Art, History and Criticism of	B	M	D
Graphic Design	B		
Dance	B	M	
Interior Design	B	M	
Studio Art	B	M	

Certificate in Arts and Community Practice: Art Education
Certificate in Arts and Community Practice: Dance
Certificate in Museum Studies: Art
Certificate in Museum Studies: Art Education
Certificate in Museum Studies: Art History
Certificate in Museum Studies: Dance
Certificate in Museum Studies: Interior Design

ADMISSIONS

Director of Admissions: Janice Finney; *Assistant Directors:* Melanie Booker, Amy Gough

General Policies

The Florida State University encourages applications for admission from qualified students regardless of gender, culture, race, religion, ethnic background, national origin, age, or disability. Admission of students to The Florida State University is within the jurisdiction of the University, but subject to minimum standards adopted by the State Board of Education within the State of Florida, Division of Colleges and Universities. Preference for admission to any term will be given to those applicants whose credentials indicate the greatest promise of academic success in their chosen program of study.

An application for admission may be obtained from the Office of Admissions, The Florida State University, and at the following website: *http://www.admissions.fsu.edu/online.*

An application should not be submitted earlier than one year prior to the term for which admission is desired. The Office of Admissions reserves the right to return all applications received after the published deadline for a particular term or after any enrollment limit or program limit is reached.

Admission is for a specific term. If the student is unable to enroll for the term indicated in the letter of admission, the Office of Admissions should be informed immediately. If the student wishes to be considered for entrance to a different term, the Office of Admissions must be advised in writing.

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 classes of the initial academic term will result in the loss of registration privileges for any subsequent term until the delinquent documents have been received.

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 The Florida State University credit and related degrees.

Every student must complete the student health history form provided by the Office of Admissions when admission is granted. The form must be forwarded to the Thagard Student Health Center prior to registration. The Florida State University reserves the right to cancel the admission of any applicant whose health record indicates the existence of a condition which may be harmful to members of the University community.

Required Documents

Applicants for graduate admission must submit the following:

Application for Admission

The completed application for admission and a nonrefundable $20.00 (U.S. currency) processing fee payable to The Florida State University should be submitted to the Office of Admissions by the appropriate deadline, specified below. Only checks drawn on U.S. banks and money orders that can be cashed at U.S. banks are acceptable. An application will not be processed without the application fee, and there are no provisions to waive or postpone this fee. The final deadlines for applications and supporting documents for **graduate applicants** with United States citizenship or permanent resident status are:

Desired Term	Application and Document Deadline
Fall 2003	July 1, 2003
Spring 2004	November 3, 2003
Summer 2004	March 1, 2004
Fall 2004	July 1, 2004
Spring 2005	November 1, 2004
Summer 2005	March 1, 2005
Fall 2005	July 1, 2005

The final deadlines for applications and supporting documents for **international graduate students** are:

Desired Term	Application and Document Deadline
Fall 2003	May 2, 2003
Spring 2004	September 1, 2003
Summer 2004	February 1, 2004
Fall 2004	May 1, 2004
Spring 2005	September 1, 2004
Summer 2005	February 1, 2005
Fall 2005	May 1, 2005

College Transcripts

Two (2) official transcripts from each college and university attended must be submitted 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" 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.

Test Scores

Official test results from the Graduate Record Examination (GRE) are required of all applicants except those students requesting admission to the College of Business. Official test scores from the Graduate Management Admissions Test (GMAT) are required of all applicants for the College of Business. The GRE or GMAT scores are considered official only when they are sent directly to the Office of Admissions from the Educational Testing Service. Examinee copies are not considered official. Detailed information on the GRE and GMAT may be obtained at the following website: *http://www.ets.org.*

International applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL). TOEFL scores are considered official only when they are sent directly to the Office of Admissions from the Educational Testing Service. Examinee copies are not considered official. Detailed information on the TOEFL may be obtained at the following website: *http://www.ets.org.*

Departmental Requirements

Some departments have additional requirements such as auditions, portfolios, letters of recommendation, departmental applications, personal interviews, and diagnostic testing. Applicants should contact the department directly regarding any special requirements.

Additional Documents Needed for International Applicants

Certification of Finances. Certification of finances must be completed before the Certificate of Eligibility (Form I-20 or DS-2019) is issued. The University is required by immigration authorities to verify the financial resources of each student 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 for the entire period of enrollment.

The Certification of Financial Responsibility form must be completed, signed by the sponsor, and verified by the sponsor's bank or financial institution. The total amount of funds available to the student must be listed for each year and must equal the total estimate of institutional costs and living expenses. All questions on the Certification of Financial Responsibility form must be accurately answered to avoid unnecessary delay in processing. For students obtaining scholarships/fellowships, an official letter of support, indicating the degree objective and the amount and duration of the funding, must be submitted to the Office of Admissions.

Admission Policies

Admission to graduate study involves acceptance to the department or school in which the applicant expects to study. Final admission to the University is subject to approval by the Office of Admissions. While there are minimum University admission requirements, established by the State Board of Education, Division of Colleges and Universities, the departments can, and frequently do, exceed those standards. It is recommended the student determine departmental requirements first.

In order to meet minimum University admission requirements, the applicant must have, or be a candidate for, a baccalaureate degree or equivalent from a regionally accredited institution and meet at least one of the following criteria: 1) Have earned a minimum 3.0 (on a 4.0 grading scale) grade point average in all work attempted while registered as an upper-division student working towards a baccalaureate degree, or 2) Have earned a minimum score of 1000 on the combined verbal and quantitative portions of the GRE or a minimum score of 470 on the GMAT (College of Business applicants only), or 3) Have earned a graduate degree from a regionally accredited institution. A student who is not in good standing at the last institution attended will not be admitted for graduate study.

An applicant who has not graduated from one of the appropriate regional accrediting agencies may be considered for admission as a provisional graduate student. For information on provisional graduate status, see the following subsection on 'Provisional Graduate Students.'

International applicants whose native language is not English are required to have a score of 550 or higher on the paper-based, or 213 or higher on the computer-based TOEFL examination. Some departments require a higher score. International students expecting to receive appointments as teaching assistants are required to pass a test of spoken English as well.

Teacher Education Programs

Section 1004.04, Florida Statutes, Public Accountability and State Approval for Teacher Preparation Programs and State Board of Education Rule 6A-5.066 require that all students seeking admission into graduate teacher education programs at The Florida State University must achieve a score of 1000 on the combined aptitude portions of the Graduate Record Examination (GRE) **or** have passed all sections of the Florida CLAST (waivers or other alternative means of meeting this requirement are not acceptable).

All students planning to pursue a teacher education program at The Florida State University must be formally admitted to teacher education. Admission to the teacher education program is administered by the Dean of Education and assigned to the Office of Academic Services, *108 Stone Building*. Admission to teacher education is distinct from admission to a college or school in that students must meet State of Florida admission criteria. For details on the criteria for admission to teacher education, the student should refer to the 'Planning Guide to Teacher Education Programs' section in the "College of Education" chapter of this *Graduate Bulletin.*

Total program length for state-approved teacher preparation programs are subject to revision based on changes in Section 1004.04, Florida Statutes, Public Accountability and State Approval for Teacher Preparation Programs and State Board of Education Rule 6A-5.066, Approval of Preservice Teacher Preparation Programs.

Admission/Readmission Appeal Procedure

Applicants to graduate programs who meet minimum standards of admission to the State of Florida, Division of Colleges and Universities system 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 decision:

1. Written requests for reconsideration must be received by the Office of Graduate Studies within thirty (30) days of the date of the letter of denial. Specific reasons for the request must be included and supporting evidence, in writing, should be included with the request;

2. The Office of Graduate Studies shall forward the request for reconsideration to the appropriate academic department within three (3) working days;

3. The request for reconsideration 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 shall review the request for reconsideration within thirty (30) days of receipt of the request by the academic department. Decisions by the committee shall be immediately forwarded to the Office of Graduate Studies, and the Office of Graduate Studies shall notify the applicant of the decision within seven (7) days of the committee's decision. This decision shall be final and there shall be no further appeals.

Applicants to graduate programs who do not meet minimum standards of admission to the State of Florida, Division of Colleges and Universities system and who are denied admission to a graduate program may request reconsideration of their applications. A limited number of admission exceptions are available at the discretion of the academic dean having jurisdiction over the program of study. Any appeal for admission by exception should be made directly to that academic dean.

Provisional Graduate Students

A student who has filed an application for admission to a graduate degree program, but who has not been admitted as a regular graduate student, may, under certain conditions, be admitted as a provisional graduate student with the consent of the department chair. The student will be admitted to this category in accordance with normal admission procedures. The Office of Admissions will notify the student by letter of acceptance in this category and will include an appropriate explanation of the meaning of the provisional classification.

A provisional graduate student will be admitted to the appropriate major and division and will register in the same manner as a degree-seeking student. Under no circumstances will the student remain in the provisional classification for more than one semester.

A provisional graduate student who meets the minimum admission requirements of the State Board of Education may be changed to regular graduate status upon request by the department chair for the following semester or a future semester. A provisional graduate student who does not meet the State Board of Education requirements must have taken at least nine (9) semester hours of graduate-level course work (excluding S/U courses) during the semester on provisional status and must have earned a 3.0 average on all graduate work in order to be admitted to regular graduate status. Upon regular admission the applicant will be counted as an exception.

A provisional graduate student who is changed to special student status and subsequently seeks admission to regular graduate status must comply with the policies established for special students who change to regular graduate student status. For information on the special student classification, see the following subsection on 'Special (Non-Degree Seeking) Students.'

A provisional graduate student is subject to the retention and dismissal regulations appropriate to a regular graduate student. If a provisional student is changed to a special (non-degree seeking) student after incurring probationary status, the permanent record will retain the probationary status statement but the student will not be subject to further retention review as a provisional student.

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

The files of provisional graduate students will remain in the Office of Admissions until the student is changed to a regular graduate or postbaccalaureate special classification, or until the student is denied regular admission. All classification questions should be directed to the Office of Admissions.

Readmission

A regular graduate student who is making application for readmission to the University after a period of absence and having left in good stand-

ing, or after having been granted a degree, or after having been registered for examination only, expecting but failing to complete a degree, should apply to the readmissions section of the Office of Admissions. (Former special students who wish to be considered as regular graduate students should apply through the Office of Admissions. Former provisional graduate students should apply for admission through the Office of Admissions.) An application for readmission is required of students who wish to reenter the University after an absence of two or more terms. Doctoral students who have passed the preliminary examination have five years to complete their degree requirements. For all other students, if seven years have elapsed since the student's departure from the University, the student must make application to the Office of Admissions, according to the procedure prescribed for new admission.

Readmission After Multiple Withdrawals

When a student has withdrawn three (3) or more times from the University, subsequent readmission will first be considered by a committee whose charge is to assess the student's capability of making satisfactory progress to 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.

Special (Non-Degree Seeking) Students

A special student, that is, one who registers as a non-degree seeking student, who subsequently decides to pursue a degree must apply for admission through the Office of Admissions. The student may be reclassified as a regular graduate student upon meeting regular graduate admission requirements. If the special student does not meet regular graduate admission requirements, the student must have taken at least nine (9) semester hours of graduate-level course work and have at least a 3.0 average on all graduate-level work before the student's status can be reviewed for change to regular graduate student status. Upon regular graduate admission such a student will be counted in the exception category.

Work taken as a special 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 (12) 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.

Because of critical limitations on the availability of space, special students must be admitted to courses only by permission of the graduate officer of that particular academic unit.

The University generally does not issue I-20 or DS-2019 visa documents for international special students. At the request of a department, the University will provide a visa document for special students who are accepted for full-time enrollment in a certificate program. The department must contact the International Center (*http://www.fsu.edu/~fsu-isc*) and the student must provide evidence of financial support and other information required by the United States government. In addition, the student must purchase or provide proof of health insurance coverage prior to enrollment.

Second Graduate Program

A student who has completed one graduate degree program at The 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.

Transient Graduate and Postdoctoral Students

A graduate student seeking a degree from a university other than The Florida State University or a postdoctoral student may register for course work at the graduate level without going through regular application procedures. Transient students must receive prior approval from their graduate deans for the courses to be taken for transfer to their home institutions. Approval forms from the home institution must be submitted to the Dean of Graduate Studies, The Florida State University.

A postdoctoral student may register upon the request of the department in which work is to be taken. The request forms, available at the Office of Admissions, will be signed by the departmental chair and transmitted to the Dean of Graduate Studies for postdoctoral registration approval. Registration is through the Special Students section of the Office of the University Registrar.

Both types of registration require no transcripts, GRE scores, or application fee; however, tuition fees must be paid.

Traveling Scholar Program

The University participates in a traveling scholar program which enables a graduate student to take advantage of special resources available on another 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 any 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 at its option continue its 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 at the host institution.

Academic Common Market

The academic common market is an interstate agreement among southern states for sharing academic programs. Participating states enable 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 academic common market student an applicant must obtain certification from the common market 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. For information on the state's authorization of programs or on the identity of the coordinator for a particular state, contact the *Office of the University Registrar or Southern Regional Educational Board, 592 Tenth Street N.W., Atlanta, GA 30318-5790; (404) 875-9211*. For information about The Florida State University's programs participating in the Academic Common Market, contact the *Office of the Dean of the Faculties, 314 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 course work and faculty participation within agreed upon limits can occur on the campus of either or any of the participating universities. For information on possibilities in a particular discipline, students should contact the academic department.

International Applicants

Notice of Admission

If a student's application for admission to The Florida State University is approved, an official notice of admission will be sent by the Office of Admissions with the appropriate immigration form. Admission is for a specific term. If the student is unable to enroll for the term indicated in the notice of admission, the Office of Admissions should be informed immediately. If the student wishes to be considered for entrance to a different term, the Office of Admissions must be advised in writing. Under no circumstances should an applicant make plans to enroll until officially notified by the Office of Admissions that admission has been granted. Students who come to campus without first receiving an official notice of acceptance do so entirely at their own risk. The student's presence on campus will not influence the decision on the application for admission.

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 and guarantee that they will receive funding for the duration of the program. Unless applicants show written evidence of having financial support for the entire time required to complete the degree program, they will not be granted a student visa.

If the student's government limits the amount of money that may be sent to the United States, the applicant should make sure that sufficient funds will be available. When applicants leave their country, they must have enough money to pay for traveling expenses to the University, fees for the entire term, living expenses until more money arrives, and the return fare to their home country. Students must be sure that they will have sufficient financial resources to cover all costs during their stay at the University. 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. Students often assume, incorrectly, that additional financial assistance or part-time employment will be available. International students are permitted to work off campus only in exceptional circumstances. Each year many students find themselves in serious financial difficulties because they did not arrange for adequate support. **Before making firm plans to come to the United States, international applicants should read the following sections carefully.**

The costs given are estimated minima and are subject to change. The following estimates are based on one academic year (two semesters —Fall and Spring) and are for unmarried students with no dependents. Additional funds must be included for spouse or family ($4,000 for spouse and $2,000 for each child per year). Biographical data must be provided for each family member accompanying the student to the United States. The data should include complete name, date of birth, gender, city of birth, country of birth, country of citizenship, country of permanent residence, relationship to the student (wife, husband, son, daughter) and, for students transferring to The Florida State University from another university, each family member's SEVIS ID number. Approximately one-half of the estimated total amount should be available at the beginning of each semester since University fees must be paid upon registration at the start of each term.

Registration Fees and Out-of-State Tuition*	$16,220
Books and Supplies	700
Room and Board**	8,220
Insurance***	508
Miscellaneous	2,000
TOTAL	$27,648

*Graduate tuition and fees are based on estimates of twelve (12) hours per semester at 2002–2003 tuition rates. Students must register for a minimum of twelve (12) hours each semester unless they have been awarded an assistantship. Assistantship holders may register for nine (9) hours each semester with departmental approval. It is estimated that an additional $6,082 will be necessary for tuition and fees if the student will be attending summer school.

**On-campus housing only. Off-campus housing costs are considerably higher.

***All international students who are admitted to the University must maintain a health insurance policy for the duration of their enrollment. Dependents of international students in "J" visa status also are required by federal regulations to have health insurance coverage for the duration of their stay in the United States. Estimated annual health insurance costs: student-$508; student and husband/wife-$2,294; student and child-$1,152; student and family-$3,626.

Note: international applicants are encouraged to visit the website *http://admissions.fsu.edu/intl* for current costs.

Passports and Visas

International applicants will need a passport from their own government and a visa from the United States Consulate to enter the U.S. 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 United States school before a passport will be granted. To apply for a visa, applicants should take their passport and Certificate of Eligibility (Form I-20 or DS-2019), issued by The Florida State University, and proof of adequate financial support for studies and living expenses, to the nearest United States Consulate.

If students are coming to the University specifically for the purpose of studying, they will 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-1visa which is typically granted to government-funded students) and proof that sufficient financial support to cover all expenses for the entire period of study in the United States is available. Graduate students holding these visa types are normally required to carry from nine (9) to twelve (12) semester hours each semester, depending on the requirements of their department and the terms of any teaching or research assistantship.

Health Insurance

The University's Thagard Student Health Center provides basic 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. In addition, international students who will be accompanied by dependents are required to purchase health insurance coverage for them. For more information regarding health insurance, contact the *Thagard Student Health Center, (850) 644-4250, http://www.tshc.fsu.edu*.

International applicants are required to bring a medical history to campus which describes previous illnesses and/or surgery prior to enrollment. If students have ever had tuberculosis (or scars appearing on chest X-rays) or other serious infectious diseases, they should be sure to have thorough medical studies made before coming to the University and bring the reports from those studies to campus. International applicants must be immunized, and show proof of such immunization, prior to registration.

Intensive English Program

English is the language of instruction and communication at the University. If international applicants are not adequately prepared in English, they 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. The Florida State University offers such a program through the Center for Intensive English Studies. Detailed information on the center may be obtained at the following website: *http://www.fsu.edu/~cies.*

Admission to the Intensive English Program does not in any way imply that admission to The Florida State University will be approved.

International Center

Orientation for new international students is **mandatory** and is held before Fall, Spring and Summer semesters. Orientation is required for undergraduates, transfer students, and students coming directly from their countries, as well as students readmitted to the University. New federal reporting requirements make it essential for international students to report to and stay in close communication with the International Center (IC). All undergraduate international students are required to attend Undergraduate Orientation in addition to the International Center Orientation. For addi-

tional information, please refer to the University Orientation website at *http://www.fsu.edu/orientation*.

Students receive the *International Student Handbook* and other useful materials about University and community resources. Copies of immigration documents are made for University files. Students receive information and advice regarding insurance, immunization, and other health requirements. Returning international students address the concerns of students who have newly arrived from their countries.

International students receive notification of International Student orientation dates and times from International Admissions, the International Center and via the IC website at *http://www.fsu.edu/~fsu-isc*.

Note: incoming international students are **not** allowed to register before presenting their immigration documents to the staff of the International Center and being cleared by Thagard Student Health Center, who will verify insurance coverage and proper immunization.

It is essential that international students maintain their immigration status while in the United States. For a checklist of rules to remember, please refer to the International Center website at *http://www.fsu.edu/~fsu-isc*.

Most departments hold orientation sessions for new graduate students during the week before classes.

Panama City Campus Admissions

The same policies, procedures, and requirements that pertain to the Tallahassee campus apply to the Panama City campus. Admissions information can be obtained from: *Office of Admissions, The Florida State University, Panama City Campus, 4750 West 23rd Street, Panama City, FL 32405-1020* or at the following website: *http://www.pc.fsu.edu.*

College of Law Admissions

For information regarding the College of Law and for receipt of a complete application packet, interested students should contact: *Office of Admissions, College of Law, The Florida State University, Tallahassee, FL 32306-1601* or at *http://www.law.fsu.edu*.

College of Medicine Admissions

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: *Office of Admissions, College of Medicine, The Florida State University, Tallahassee, FL 32306-4300* or at *http://med.fsu*.edu.


Florida State University
S.D.S.
Undergraduate Studies

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

Associate Vice-President and University Controller: Larry D. Reese;
Executive Director, University Financial Services: Dr. Perry W. Crowell;
Director: Marcia Murphy

Tuition and Fees

Fees are established by the Florida State University Board of Trustees and the Florida State Legislature and are subject to change without notice. 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, the student's schedule, and whether the student is a resident of the state of Florida. Students should review their Student Assessment Payment Schedule to verify the accuracy of the charges. The amount of tuition due is usually available during registration via telephone or the web. However, because Fall semester tuition must be reviewed by the legislature, there is a delay in posting this amount. Fall fees should be available in mid-summer. 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. All payments will be applied to current tuition first and then to the oldest debt, unless specified at time of payment.

Residency Requirements for Tuition Purposes

At The Florida State University there are three offices responsible for the initial review of residency for tuition purposes under Section 1009.21, Florida Statutes and Florida Board of Governors Rule 6C2-2.02416. These offices are: l) the Office of Admissions, 2) Law School Admissions, and 3) the Office of the University Registrar. The first two 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 students will be classified in accordance with the information on their applications, including the "Florida Resident Affidavit" on the last page of the application, providing no other information is available calling into question the information on the application. The following is a summary of all the pertinent requirements for qualifying as a Florida resident for tuition purposes. For complete information, see Section 1009.21, Florida Statutes and Rule 6C2-2.02416 of the Florida Board of Governors.

To qualify, students must: be a United States citizen, resident alien, parolee, Cuban national, Vietnamese refugee, or other refugee or asylee so designated by the United States Immigration and Naturalization Service,

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 domiciliary 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 guardian must qualify),

And

Submit the following documentation (or in the case of a dependent student, the parent must submit documentation) prior to the last day of registration for the term for which resident status is sought (**Note**: the various summer terms are considered one semester for the purpose of establishing residency):

1. Documentation establishing legal residence in Florida (this document 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 in determining legal residence:

   a) Declaration of domicile.

   b) Proof of purchase of a home in Florida which you occupy as your residence.

   c) Proof that student has maintained residence in the state for the preceding year (e.g., rent receipts, employment records).

2. Documentation establishing bona fide domicile in Florida that is not temporary or merely incident to enrollment in a Florida institution of higher education. 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:

   a) Declaration of domicile.

   b) Florida voter's registration.

   c) Florida vehicle registration.

   d) Florida driver's license.

   e) Proof of real property ownership in Florida (e.g., deed, tax receipts).

   f) Verification of employment 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.

   g) Proof of membership in or affiliation with community or state organizations or significant connections to the state.

   h) Proof of continuous presence in Florida during periods when not enrolled as a student.

   i) Proof of former domicile in Florida and maintenance of significant connections while absent.

   j) Proof of reliance upon Florida sources of support.

   k) Proof of domicile in Florida of family.

   l) Proof of admission to a licensed practicing profession in Florida.

   m) Proof of acceptance of permanent employment in Florida.

   n) Proof of graduation from high school located in Florida.

   o) Any other factors peculiar to the individual which 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.

3. No contrary evidence establishing residence elsewhere.

4. 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,

Or

Be a member of the Armed Forces on active duty stationed in Florida, or a spouse or dependent,

Or

Be a member of the full-time instructional or administrative staff of a state public school, community college, or university in Florida, a spouse or dependent,

Or

Be a dependent and have lived five years with an adult relative who has established legal residence in Florida,

Or

Be a person who was enrolled as a Florida resident for tuition purposes at a Florida institution of higher education, but who abandoned Florida residency and then reenrolled in Florida within 12 months of the abandonment,

Or

Be a Latin American/Caribbean scholar,

Or

Be a United States citizen living on the Isthmus of Panama and have completed 12 consecutive months of college work at The Florida State University Republic of Panama Branch, or a spouse or dependent,

Or

Be a graduate student of the Southern Regional Education Board's Academic Common Market attending Florida's state universities,

Or

Be a full-time employee of a state agency or political subdivision of the state when student fees are paid by the state agency or political subdivision for the purpose of job-related law enforcement or corrections training,

Or

Be a qualified beneficiary under the Florida Pre-Paid Postsecondary Expense Program Section 1009.98(b)1, Florida Statutes,

Or

Be a McKnight Fellowship Recipient,

Or

Be an active member of The Florida National Guard who qualifies under Section 1009.21, Florida Statutes, for the tuition assistance program.

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 to the University Registrar if they are already enrolled.

Tuition and Instructional Fees

The "University 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 proposed rates; however, since the *Graduate Bulletin* must be published in advance of its effective date, it is not 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 on the Internet at *http://www.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. Rates applicable to the main campus for Fall term, 2002, and Spring and Summer terms, 2003, are used as a basis for estimating course charges per credit hour for Florida and non-Florida residents. **Fees applicable to 2003–2004 and 2004–2005 had not been confirmed by the Florida Legislature at the time of the publication of this document.**

Actual Course Fee Charge Per Credit Hour 2002–2003 Schedule

Course Level Students	Florida Students	Non-Florida
0001–4999	$ 84.58	$402.71
5000 and above	$178.26	$670.92
Thesis/Dissertation	$178.26	$670.92
Law	$199.43	$712.59

Students registered in courses for zero (0) credit hours (master's comprehensive examination, master's thesis defense, dissertation defense, or other graduate-level zero [0] credit hour courses) will be charged for one (l) Florida resident graduate credit hour, unless also enrolled in other credit courses at The Florida State University during the same academic term.

Special Fees, Fines, and Penalties

(All fees subject to change)

Application Fee: $20.00. Applicants for admission are assessed a nonrefundable application fee.

New Student Orientation Fee: $25.00. This fee is assessed when new students register to attend the required University orientation program. This is a nonrefundable fee.

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. (Rate subject to change.) 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," published in the *Registration Guide*).

Florida State University identification Card (FSUCard): $10.00. This fee is assessed against first-time FSUCard recipients. This fee may be paid when tuition is paid.

Replacement FSUCards: $15.00. A fee for the preparation of a new card is assessed against those 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 transcript requested.

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: $4.90 per credit hour. 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://www.vpfa.fsu.edu/parking.*

Returned Checks or Electronic Payments Charge: $25.00 or five percent (5%) of the amount of the check/electronic payment, whichever is greater (rate subject to change). A returned check/stop payment charge is assessed against a student's account who has a check or electronic authorization for payment returned by the bank to The Florida State University. The 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 The 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 The Florida State University for insufficient funds, uncollected funds, closed accounts, stop payments, etc. 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 due date, a late payment fee is assessed to tuition. The Florida State University places a hold on accepting any personal checks or electronic payment authorizations from anyone on the student's account from the student for ninety (90) 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 given to the student via mail to the address on the check or to the last maintained address in The 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 within seven (7) working days with cash, money order or cashier's check. The 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 and Dissertation Fees: A graduate student submitting a thesis or dissertation is assessed a binding fee at cost (extra charge for oversize copies). In addition, doctoral students submitting a dissertation are assessed a microfilming fee and may pay a copyright fee, if desired.

Binding Fee: At cost.

Microfilming Fee: At cost.

Copyright Fee: Optional, 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 which is used to offset the cost of scientific materials or items that are consumed in the course of the students' laboratory activities. These fees are assessed based on the course.

Library Fees

(All fees subject to change)

Fines for Late Return (per book or unit, per day): $0.25. A fine for late return of a library book will be assessed against students who do not return library books by the due date.

Fines for Overdue Reserve Library Books (per book, per library hour): $0.25.

Fines for Failure to Respond to a "Recall Notice": (per book or unit, per day): $0.25. A fine for the failure to respond to a "recall notice" will be assessed against borrowers who do not return library books by the recall due date specified in the notice.

Housing Costs

For complete descriptions of housing facilities, services, costs, and how to apply for University housing, refer to the "Housing" chapter of this *Graduate Bulletin.*

Annual Estimate of Cost

The annual estimated costs listed below are for the 2002-2003 academic year. The tuition and fee estimate is based on two twelve (12) semester hour terms.

	Graduate In-State	Graduate Out-of-State
Tuition/Fees	$ 4,396	$ 16,220
Housing	$ 4,320	$ 4,320
Food	$ 3,900	$ 3,900
Books and Supplies	$ 700	$ 700
TOTAL	$ 13,316	$ 25,140

Note: international students should refer to the "Admissions" chapter of this *Graduate Bulletin* 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. Grades and credit are not valid until all financial obligations are satisfied. 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. The basic Florida Prepaid Plan 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, including those receiving financial aid, must be submitted by the fifth day of the term. Students can view the amount of their tuition and fees due on the Internet at *http://www.fees.fsu.edu* or when they register for classes by telephone or through the web. Other options include kiosks located on the first floor of *University Center—A Building* and second floor of *Union—Krentzman Lounge*, calling *(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, cashiers check or FSUCard when paying in person. The Florida State University does not accept two party checks or foreign checks for payment. Make checks payable to Florida State University and include the student's social security number, local phone and address on each check. Payment methods are described below. Credit card and debit card payments can be made through the Internet at *http://www. fees.fsu.edu* or at kiosks located around campus.

Automated Debit to FSUCard for Tuition Payment. The Florida State University offers a free online payment service to students with FSUCard accounts at SunTrust for the payment of tuition and fees, and other University charges. Students may authorize charges to be deducted from their FSUCard bank account by going to the online billing feature at *http://www.fees.fsu.edu* and clicking on the option: "Would you like information about automatic debit payment from your FSUCard?" This payment option is available for a limited time and certain restrictions are applied. Additional information is available on the Internet.

Installment Contracts. Students incurring tuition fees greater than $150.00 are eligible to execute an installment fee payment agreement for the fall and spring semesters (not available for summer semesters). The initial payment, which must be one half of the total tuition, plus a $10.00 fee (subject to change), is due by the tuition payment deadline. The second half of the installment payment is due by the sixth week of class, as specified on the agreement. 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. Students should appear in person to initiate the installment agreement. A $10.00 fee will be assessed at the time of first payment for this option. Once an installment contract is executed, any course added at a later date must be paid in full within five (5) 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. Installment contracts may be initiated through the mail or drop box, with a letter attached requesting the installment contract. This option is not available on the Internet.

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 offices at *A1500*, and in *Krentzman Lounge* at the Student Union. 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 located outside our office and other locations as posted. Payments are processed the next business day. Payments received in the drop box by close of business on the tuition payment deadline will not be considered late. Please do not deposit cash. We will not process foreign checks or two party checks. Make checks payable to Florida State University and write your social security number, current address and phone number on the check. Checks not completed properly will be considered late.

Mail-In Fee Payments. When paying fees by mail, send a personal check, money order, or cashiers check for the full amount of fees due. Please do not send cash. We will not process foreign checks or two party checks. Payments must be received no later than the tuition payment deadline. Make checks payable to Florida State University and write your student identification number, current address and phone number on the check. Checks not properly completed will be

considered late. Payments should be mailed to *The 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 fifth day of the semester, and preferably thirty (30) days in advance. Those students receiving financial aid should submit the documents by the fourth 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.) Outstanding tuition and charges from a previous semester will be deducted from financial aid, if permitted to register. 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 the agency pays (less University charges) after the agency has 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.

Department Billing. Department billings must be submitted to the Office of Student Financial Services by the appropriate college or school as early as possible and preferably by the fourth day of each semester, but definitely no later than the fifth class day of the 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 department billings, undergraduate students should contact the Dean of the Faculties at *644-3375*; graduate students should contact the Dean of Graduate Studies at *644-3500.*

State Employee Registration

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. The Florida State University does not consider the following as space-available courses: limited access programs; remedial courses; dissertation, thesis, and directed individual study (DIS) courses; internship courses; distance learning 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.

The Florida State University accepts only the official FSU State Employee Tuition Wavier Form. Agencies may require additional paperwork or forms that will not be accepted 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 website at *http://registrar.fsu.edu/services/emp_tuit_waive* for additional information including the link to download the State Employee Tuition Wavier Form.

Panama City Campus

Students who intend to enroll at the Panama City campus of The Florida State University are to pay their fees at: *Controller's Office, 4750 West Collegiate Drive, Panama City, FL 32405.* This office will answer any questions concerning fee payments and financial aid distribution. For further information, please call *(850) 644-2090, ext 175.* Inquiries and payments can be made through the Internet at *http://www.fees.fsu.edu.*

Fee Liability

Liability is incurred for all credit hours remaining on a student's schedule at the close of the official drop/add period each term. Out-of-state tuition and matriculation fee waivers will not cover dropped or withdrawn classes.

Delinquent Fees

Students who have amounts owed to the University may not complete their registration, participate in graduation ceremonies, receive a diploma, 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 student loans. All payments will be applied to current tuition first and then to the oldest outstanding debt. Non-refundable collection fees are added to a student's account if the student has had an outstanding debt for 120 days or longer.

Registration "Stop" for Outstanding Charges

A "stop" is placed on all 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.

Tuition Waivers, Deferments, and Financial Arrangements

Out-of-State Tuition and Matriculation Waivers

In the interest of the general welfare of the state of Florida, and in order for Florida to contribute to the fulfillment of national and international obligations, the State Board of Education authorizes the President of the University to waive portions of out-of-state tuition and matriculation fees for a limited number of graduate students. Graduate assistants who have at least a one-quarter time assistantship (teaching or research) or students on a fellowship of at least $3,150 per term may apply.

Insofar as they are available, out-of-state tuition and matriculation fee waivers are reserved for full-time, degree-seeking graduate assistants and fellows. Graduate assistant and fellowship stipends are normally subject to federal income tax.

Provisional, special, and part-time students at the graduate level are not eligible for tuition waivers. Tuition waivers must be submitted by the appropriate school or college by the fourth day of classes. **Tuition waivers do not cover the total amount of fees due and may have an effect on financial aid awards**.

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 any fees assessed.

Waivers for Florida Residents Over 60 Years of Age

When registering for 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. **Note**: audited courses do not earn credit hours or appear on a student's permanent record. For further information, refer to the 'Reg-

istration' entry of the "Admissions" and "Office of the University Registrar" chapters of this *Graduate Bulletin.*

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. **Note:** lack of funds is not a valid reason for waiving the late fee. Request to waive late fees must be made by completing a waiver request form. 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 **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 waiver of the penalty for late payment fees. The appeal committee's decision is the final step in the University's appeal process. Attendance by the student is recommended. 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 previously approved agency to pay fees on behalf of the student. The billings are to be completed by the student at *A1500 University Center* no later than the fifth 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 fee payment deadline. Students with financial aid pending will have their tuition paid by their financial aid and will have their veteran's deferment nullified.

Note: if a student receives a veteran's deferment and tuition is still not paid by the due date, the student will be assessed a late payment fee and 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 The Florida State University shall pay a nonrefundable application fee of $20.00 (subject to change). This fee may be waived for 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.

Refunds of Fees

Regulations Concerning Refunds of Fees Paid

A student incurs a liability for all credit hours that remain on the student's 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 fees and outstanding University charges) during the term will be carried forward and will be applied against subsequent University charges incurred or may be refunded upon request. Full refunds of tuition fees may also be made 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 fees are paid may be eligible for a tuition refund. Refunds will be processed weekly by the Office of Student Financial Services. Any amount paid in excess of the amount owed (assessed fees and outstanding University charges) during the term will be carried forward and may be applied against subsequent University charges incurred or will be refunded upon request. The refund will be processed as a credit to the student's FSUCard account for currently enrolled students. Checks will be mailed to those students who are no longer enrolled. Over-payments made by credit card will be refunded to the credit card. Any outstanding charges owed to the University will be deducted and the balance will be issued as a refund. Refunds for financial aid may be returned to the source as specified by federal law. See the subsection 'Withdrawal and Return of Federal Financial Aid' in the "Financial Information" chapter of this *Graduate Bulletin.* 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. Students who withdraw after the fifth day of the semester, but prior to the end of the fourth week of the semester (or for summer sessions by the first twenty-five percent [25%] liability period 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.

Note: in the case where a withdrawal petition is approved, a refund can only be provided if the refund or withdrawal request is submitted within six months after the end of the semester 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: *Director of Housing, 109 Student Life Building.*

Parking Decals: *Director of Parking, C2300 University Center*.

Withdrawal and Return of Federal Financial Aid

Effective Fall 2000, students who withdraw and have received state or federal financial aid (Title IV programs) will be required to repay to state or the federal program the amount of **unearned** financial aid funds disbursed to them as of their withdrawal date. Title IV programs includes Pell Grants, Perkins Loans, Supplemental Educational Opportunity Grants (FSEOG), Stafford loans (subsidized and unsubsidized), and Parent Loans (the Federal PLUS program). The **unearned** amount of federal program funds is calculated based on the percentage of the semester completed before the date of withdrawal. Both the University and students receiving federal financial aid are required to return **unearned** financial aid to the federal government. The University is required to return the **unearned** portion of the Title IV 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 state or federal government by the University will be credited against the student's total liability of **unearned** funds. How-

ever, students will owe the University the amount returned to the state or federal government for institutional charges.

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 grant programs, **unearned** grant program funds are considered overpayments and students are required to return 50 percent of the grant. Students who owe grant overpayments remain eligible for Title IV program funds for 45 days if during those 45 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 Title IV 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.**

Student Cancellation of Schedule

A student may cancel registration during the first five 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*. Beyond the fifth day of the semester a student cannot voluntarily cancel registration but must apply for withdrawal from the University. 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. 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

The 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 graduate students. In addition to providing funds on the basis of demonstrated financial need in the form of grants, work awards and loans, the University offers scholarships to recognize and reward talent, academic achievement and meritorious performance. Graduate students may apply for long-term loans and college work-study. Graduate fellowships and assistantships are awarded through the Office of Graduate Studies and the respective academic departments.

The Office of Financial Aid is committed to serving and guiding students through the process of applying for financial aid. **Students are urged to begin investigating the following avenues of help promptly:**

A financial aid brochure is updated yearly and explains the requirements and processes for application for financial aid. It may be obtained by writing to: *The Florida State University, Office of Financial Aid, A4400 University Center, Tallahassee, FL 32306-2430* or by calling *(850) 644-0539*. Information on financial aid is also available on our website at *http://www.fsu.edu.*

Help in completing the financial aid forms is available from professional financial aid counselors located in the University Center and periodically at other locations in the greater Leon County area. Continuing students are mailed a federal renewal form in December by the federal processor.

To obtain information on financial aid and the status of their application, students may access their status online via the web at *http://www.studentsfirst.fsu.edu.* Access also is available through *http://www.fsu.edu* or by calling the Express Telephone System (ET) from 8:00 a.m. through 6:00 a.m. (22 hours per day) at *(850) 644-0539*. (The hours of operation for the Office of Financial Aid are Monday through Friday from 8:30 a.m. to 5:00 p.m.) The Information Center is open Monday through Friday from 8:30 a.m. to 5:00 p.m. Telephone counseling is available Monday through Friday 9:00 a.m. to 5:00 p.m.

The **Student Aid Resource (STAR) Center** is a multimedia resource center designed to provide information about sources of financial aid, short- and long-term personal financial planning, referral services to the Office of Financial Aid and other campus and community resources. A more complete description of the center's services follows under 'Additional Sources of Financial Aid.'

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 West Collegiate Drive, Panama City, FL 32405.*

Eligibility

Financial aid eligibility requirements normally include a minimum enrollment of twelve (12) 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 (12) hours per semester constitutes a full-time load for graduate students and fellowship holders. Nine (9) 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 2003–2004 year begins January 1, 2003, and ends June 30, 2004. 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, 2003. The Florida State University priority deadline is February 15, 2003. Students may still apply after this date, but some program funds may be exhausted. Estimated student/parent tax data is allowed for completion of the FAFSA document.

Financial Aid Application Process

To apply for federal, state and institutional aid at The Florida State University, students must complete the Free Application for Federal Student Aid (FAFSA). Students may complete a paper application (available from any high school or postsecondary school) or an application may be completed directly over the Internet by accessing the following web page: *http://www.fafsa.edu.gov.*

Internet applications can be completed from any home computer with secure Internet access, or through Internet capable computers in many libraries and schools. Students in the Tallahassee area may use computers at The Florida State University to submit their application. Continuing students have access to various computer labs on campus. Prospective students may use computer terminals located in the Office of Financial Aid's Information Center.

Whether a student applies through a paper or an Internet application, the following materials will be necessary to complete the data required:

- The student's social security card and driver's license;
- W-2 forms or other records of income earned;
- Student's and student's spouse's (if married) Federal Income Tax Return (estimated figures are acceptable for application before filing of return);
- If the student is required to file as a dependent student, Federal Income Tax Returns for both student and parents are required. Estimated figures are acceptable for applications completed before filing of tax return);
- Records of other untaxed income received, such as welfare benefits, social security benefits, TANF, veteran's benefits, or military or clergy allowances;
- Current bank statements and records of stocks, bonds and other investments;
- Business or farm records, if applicable; and
- Student's alien registration card, if student is not a U.S. citizen.

Note: students may apply for financial aid before applying for admission to The Florida State University, but while early application for aid is recommended (as soon as possible after January 1) a student can not be awarded aid until he/she is officially accepted for admission to The Florida State University.

Loan Entrance Counseling Sessions

Federal regulations require all students receiving a Federal Subsidized/Unsubsidized Stafford Loan or Federal Perkins Loan to participate in a loan entrance counseling session 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 The Florida State University can complete the loan entrance 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 link. This will connect the student with an official loan entrance counseling 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 page to retain for their records. Students who prefer an alternative format, or who have questions about loans or the loan entrance counseling information process may contact the Office of Financial Aid.

Financial Aid Distribution and Payment of Tuition and Fees

Financial aid includes scholarships, Bright Futures, grants and loans. 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 a Disbursement Authorization Statement (DAS) choosing one of the following two ways to receive financial aid:

1. By Electronic Funds Transfer (EFT) to your FSUCard Account at SunTrust. Approximately 80% of the student body receiving financial aid at FSU have chosen to process their aid electronically and take advantage of these convenient banking services; or

2. By a check mailed to the local address on file. It is the student's responsibility to keep his or her address record current with The Florida State University. Checks are not forwarded by the post office.

3. **Exceptions:**

   a. Students who have a hold on their funds will be sent a message to their University Garnet e-mail account advising them of the required action to clear the hold. Students must present a picture ID to pick-up financial aid on hold or receive a short-term loan. 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. After the inital 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 Disbursement Authorization Statement (DAS).

All financial aid students must check their financial aid status at *http://www.fees.fsu.edu* or by calling *(850) 644-0539* on the scheduled call-in date. Students will **not** need to appear in person for financial distribution **unless** their online billing statement states that they **must** clear a hold. Students required to attend financial aid distribution should report to the Office of Student Financial Services, *A1500 University Center* on the published **pick-up** date.

Note: if you cannot get through using this phone number or on the Internet, or if you need a financial aid deferment, you should report to the Office of Student Financial Services, *A1500 University Center* on the **distribution** date as posted. Please do not get this date confused with your telephone call-in date.

Your message will not appear on the Internet or in your voice mail box until the call-in date. After entering your social security number and your registration PIN, follow the voice instructions.

For those students who have chosen to have their financial aid processed using EFT and their FSUCard account, you will receive a message with a detailed description of each debit and credit involved in the transaction at *(850) 644-0539*. Call *1-800-SUNTRUST* for account details.

If you have any questions, please call the Office of Student Financial Services *at (850) 644-9452* or go to *http://www.sfs.fsu.edu* for more information.

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 the *Registration Guide).* After this date a $100 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 fifth day of the semester but preferably immediately after registration. Intern Participation Certificates 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.

Deferments, Loans, and Check Cancellation

Deferments

If aid is not available during the second week of the semester, financial aid recipients may be eligible for a tuition deferment. Check your Administrative Voice Message at *(850) 644-0539*, or go online to *http://www.fees.fsu.edu* to determine whether your aid has arrived or if you have received a deferment. Students who are ineligible for a deferment must pay their fees or make other arrangements by the tuition payment deadline. All students receiving a financial aid deferment must pay their tuition in full by the date stated for the deferment expiration. Failure to pay by these dates will prevent the student from registering for subsequent semesters and will cause a cancellation comment to appear on the permanent record in lieu of grades being posted.

Delayed Delivery Loans

Students in need of funds as a result of financial aid being delayed may apply for a delayed delivery loan at the Office of Financial Aid, *A4700 University Center*. To be eligible for a delayed delivery loan, a student's financial aid application must be completed by August 1. Eligibility for the loan will be determined by the type of aid awarded, the hours enrolled, and the account status. Accounts in delinquent status (past due) are not eligible for loans. A picture ID is required in order to receive a delayed delivery loan. 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. Delayed delivery loans are due when the financial aid arrives, or by the financial aid deferment deadline. Debts not paid will prohibit students from using university services such as registration, transcripts, etc.

Delayed delivery 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 a 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 pictured ID is needed in order to receive an emergency loan. Accounts in delinquent status are not eligible for loans. Past due loans will prohibit students from using University services such as registration, transcripts, etc. Loans must be repaid by the due date, or when financial aid arrives, whichever comes first.

Check Cancellation

Any Stafford Loan check available on the published distribution date and not picked up by the check cancellation deadline will be returned to the lender for cancellation.

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 (6) credit 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 "Money Matters" section of *http://studentsfirst.fsu.edu.* and select the "exit interview for financial aid" option. Students will need their Social Security Number and registration PIN or web name and password to sign onto the session. Students planning to continue their academic studies at The 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 Aid

The **Student Aid Resource (STAR) Center**, located within the Office of Financial Aid, is a multimedia resource center designed to provide information on sources of financial aid such as university-based scholarships, funds from private donors, grants, and fellowships for graduate students.

The center provides current website assistance, books, pamphlets, articles and other materials as resources for alternative types of financial aid for all students.

Individual departments described in the "Academic Departments and Programs" section of this *Graduate Bulletin* list scholarships, as well as assistantships, available for students of specific majors.

Contingent upon funding, certain need-based scholarships are available based on eligibility for financial aid and criteria set by donors. Please contact the STAR Center in the Office of Financial Aid for further information.

Scholarships, Fellowships, Assistantships

The Florida State University recognizes and rewards high academic achievement and awards scholarships on a competitive basis. The scholarship staff is available to address the individual concerns of scholarship recipients once they are on campus. Students should contact the Student Aid Resource (STAR) Center in the Office of Financial Aid. Information regarding scholarships offered to law students can be obtained from the College of Law's Admissions Office. Private scholarships must be turned in to the Office of Student Financial Services for processing and disbursement.

Financial support, in the form of fellowships, teaching and research assistantships, is also available. The student should be aware that only minimum qualifications are noted in the following list, and the selection process is highly competitive. In general, deadlines for applications occur early in January for the following academic year. Students are urged to make specific inquiry to each program, with reference to both deadline and eligibility. Refer to the individual school, college, or department in the appropriate entry of this *Graduate Bulletin.*

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. **College Teaching Fellowships.** There are a limited number of fellowships allocated to each college or school for the purpose of recruiting first-time graduate students at The Florida State University. Duties may or may not be required. Students must apply directly to their academic department.

2. **University Fellowships.** Awards are made annually to a limited number of students in any discipline for $15,000 per year plus out-of-state and matriculation fees. Application forms may be obtained from the chair of the student's proposed major department. Applications are judged by a University-wide committee.

3. **McKnight Doctoral Fellowship Program.** This program is for newly enrolling African American 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. Contact the *Office of Graduate Studies, 408 Westcott Building*, for information.

4. **Delores Auzenne Fellowship for Black Graduate Students.** Awards are $2,500 per semester, for up to two semesters. For details, contact the *Office of Graduate Studies, 408 Westcott Building.*

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.

Leslie N. Wilson Assistantships are for newly enrolling African-American students with a minimum of $5,000 per year plus an out-of-state tuition and/or matriculation fee waiver. For information contact the *Office of Graduate Studies, 408 Westcott Building*.

Student Employment Services

Last year over 2900 students found work in Tallahassee through Student Employment Services (SES). This program provides opportunities for part-time employment for students and is a comprehensive source for jobs in the private sector, at state agencies and on-campus. SES facilitates the job search process by offering an array of job locator services. Students do not need to be eligible for (or even apply for) financial aid in order to use Student Employment Services.

A variety of job listings are grouped by category (e.g. accounting, computers, retail, clerical, child care and state/county/city agencies). These listings may be accessed on the web at *http://nwrdc.fsu.edu:1204/fsyjpr01.* Listings are updated daily.

The Federal Work Study Program (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 schedule cannot interfere with a student's class schedule. Federal Work Study is awarded on a first-come, first-serve basis.

Students may also utilize their Federal Work Study awards by participating in community service through the **Community Service Learning Program (CSLP)**. This program is designed to locate and develop off-campus community service jobs and to 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 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 Federal Work Study Program and CSLP, students must complete the Free Application for Federal Student Aid (FAFSA), and submit all other required documentation.

HOUSING

Director of University Housing: Rita Moser, *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 an apartment facility, Rogers Hall, with 94 one-bedroom, double-occupancy (twin beds) apartments reserved for single graduate students.

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 791 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 local telephone):	$340.00*

Alumni Village

One-bedroom furnished apartment:	$310.00–$335.00*
Two-bedroom furnished apartment:	$335.00–$468.00*
Three-bedroom furnished apartment:	$490.00–$540.00*

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 2002–2003 figures and are subject to change.

Applications

Upon notice of admission, students receive information about housing options. The Office of University Housing sends more detailed information about University housing options and applications to all admitted students at the appropriate time before each semester. It is not necessary to request application materials. An on-line 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 apartment units require residents to file a thirty-day notice of intent to vacate. Rent is charged for thirty (30) 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 Housing Agreement is included in the housing application packet.

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, University 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.

INFORMATION SESSIONS

An information session will be given for newly enrolled graduate students at the beginning of each Fall semester—generally, one afternoon in late August. Coordinated by the Office of Graduate Studies, the Division of Student Affairs, and the individual academic departments, the session is designed to welcome graduate students to The Florida State University and introduce them to its facilities, services, and events of public interest.

During the general portion of the session, graduate students will be given information by the Dean of Graduate Studies that is essential to successful academic work. A featured speaker, a distinguished professor from the University faculty, will comment on the graduate experience, and the Vice President for Student Affairs will describe the student services available at the University.

Orientation of graduate and graduate-professional students will include an emphasis on ethical standards the University has articulated in its statement on values and moral standards and on the standards found in the canons of professional responsibility in the fields students expect to enter.

At the information session, the **Program for Instructional Excellence** will be reviewed. The program offers classes that cover the general aspects of teaching: the ethics, the potential problems, and the characteristics of quality teaching. Additional classes may be offered by the individual departments that prepare graduate students for teaching their particular field. Students will be notified by mail and through their individual academic departments of the date, time, and location of the Information Session.

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

Special orientation sessions for minority graduate students are given three weeks prior to the fall semester by the Program in African-American Studies. Interested students should contact the office located in *A5200 University Center*.

International Student Orientation

All new international students, including transfers from FSU-Panama and international students at Florida State University-Panama City (Florida) branch campus, must report to the International Center and present their immigration documents before they will be allowed to register for classes. In addition, incoming students must attend one of several orientation programs sponsored by the International Center which provides information and materials about the rights and responsibilities of international students, services and programs available to international students and their families, insurance and health issues, and life in Tallahassee. Notice of these orientation opportunities is sent to incoming students through the Office of Admissions.

Graduate Teaching Assistant Support

Instructional Development Services

Two programs that support graduate student teaching include the Program for Instructional Excellence (PIE) and Preparing Future Faculty (PFF). Both of these programs are housed in Instructional Development Services, in the Office for Distributive and Distance Learning, *C3500 University Center, (850) 644-8004*; website: *http://online.fsu.edu.*

Program for Instructional Excellence (PIE)

In addition to departmental support programs, the Program for Instructional Excellence aids graduate teaching assistants in improving their instructional skills and classroom knowledge. The program offers a wide variety of services, which are described below. *C4503University Center, 9:00–5:00,* Monday through Friday, *(850) 644-8844.*

Preparing Future Faculty (PFF) Program

The Preparing Future Faculty (PFF) program is a national network of academic leaders exploring ways to better equip doctoral students for faculty work. The PFF program was initiated by the Association of American Colleges and Universities and the Council of Graduate Schools and funded by The Pew Charitable Trusts.

Through the efforts of faculty from The Florida State University and the partner institutions, PFF is exposing graduate students to a variety of teaching roles and experiences. The PFF departmental programs take many shapes depending on the discipline and the institutions involved, but several principles are constant. The most enduring principle is *that graduate students should enter the academic profession as competent professionals who have already begun a process of growth as teachers and scholars in the academic community.*

There are several ways to become involved with the PFF project: 1) Check with your department; 2) Call PIE at *(850) 644-8844*; or 3) Visit the PFF web-site at *http://online.fsu.edu/instructor/teachingenhancement/pff.*

University-Wide Teaching Conferences

Twice each year, during the week preceding the Fall and Spring semesters, three-day and one-day conferences are held for new and experienced teaching assistants. 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 The Florida State University. Experienced instructors who feel the need for a refresher course are invited to participate in any part of the orientation they feel might be useful.

Workshop Series

Workshops and panel discussions which deal with issues specifically relevant to instructors who teach in University classrooms are held throughout the fall and spring semesters. Possible topics might include lecturing, strategies for active learning, and leading an effective discussion, along with many others. Registration information may be obtained from the program or from the student's academic department.

Individual Consultation

A member of the Instructional Development Services is usually available to discuss, on an individual basis, any aspect of an instructor's teaching assignment. Not only can an instructor receive assistance and consultation with "problem areas," but also with the proposed course design, teaching techniques, and a variety of other areas. Consultations are available on an appointment or walk-in basis.

Videotaped Observation

Video observations involves videotaping a segment of an actual or simulated teaching situation for the purpose of offering performance feedback to instructors. The main advantage is that it allows instructors to view themselves from an outside perspective. Typically, a staff member will videotape part or all of an instructor's class and then meet with the teaching assistant to discuss the tape and offer feedback. Since video observation is applicable to lectures, labs, and discussion sections, many teaching assistants find the experience rewarding as it offers a chance to view one's teaching from a student's perspective. A staff member can also observe actual classes without the aid of videotape and report back to the instructor. Please allow one to two weeks for scheduling.

Resource Book

Instruction at FSU, a resource book for instructors, conveys information on policies, procedures, and teaching techniques. Its primary function is to help instructors understand what is expected of them and to acquaint them with necessary skills to be effective in the classroom. This document is available for download at *http://online.fsu.edu/instructor*.

Online Newsletter

Available at *http://online.fsu.edu*, the *Instruction at FSU* newsletter offers teaching-related information of all kinds: articles on individual instructors and department programs, teaching improvement ideas, and news on innovative strategies and campus happenings.

Resources

Many resources on teaching are available from the program. Handouts on lecturing, testing, guide to better grading, and what undergraduates expect of you, along with many others, are available without charge. Our lending library located in *UCC 4503* is available for browsing.

Web Resources

Teaching Enhancement Website. One of the many resources available to instructors at The Florida State University is this website. The site includes descriptions and schedules of the many programs offered at the University. Please visit *http://online.fsu.edu/instructor/teachingenhancement.*

Preparing Future Faculty (PFF). This site gives links to the national PFF program as well as resources that assist graduate students in planning for a career in post-secondary education. Visit *http://online.fsu.edu/instructor/teachingenhancement/pff.*

Campus.fsu.edu. The Florida State University provides this electronic course management system to all instructors. Visit *http://campus.fsu.edu* for information on what is offered, available support, and how to request a course.

Outstanding Teaching Assistant Awards

The Program for Instructional Excellence facilitates the University's Outstanding Teaching Assistant Award program. Fifteen outstanding teaching assistants will receive cash awards and will be acknowledged at an awards presentation and reception in April.

Teaching Associate Program

The Program for Instructional Excellence (PIE) provides departments with a teaching associate to assist with departmental teaching assistant training and to serve as small group leaders and mentors during the campus-wide orientations and workshops organized by the program. This associate is an experienced teaching assistant nominated by the department and interviewed and selected by PIE. The teaching associate is the liaison between the Program for Instructional Excellence and individual departments. The appointment, therefore, carries obligations to both the administrative program and the department. Teaching associates will receive a stipend for an academic year appointment (Fall and Spring semesters). Appointments are made each year at the beginning of the Fall semester.

OFFICE OF THE UNIVERSITY REGISTRAR

University Registrar: Tim Martin
Associate Registrars: Kimberly Barber, Ron Henthorn, Yvette Herr
A3900 University Center

The Office of the University Registrar is the official custodian of permanent academic records of all past and currently enrolled students at The Florida State University. It is responsible for registering students and for maintaining official student and departmental records for the term in progress; preparing transcripts; scheduling academic space; maintaining and updating curricula; 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 for questions concerning registration, locations and meeting times of courses, errors in registration records, dropping and adding courses, cancellation of registration, and grade problems.

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

Persons with Disabilities. Any student in need of specific services and reasonable accommodations should contact the *Student Disability Resource Center, 1st Floor, Kellum Hall, (850) 644-9566.*

Registration

During each academic term, an official registration is held for all currently enrolled, degree-seeking students who expect to be enrolled for the following term.

Registration at The Florida State University is conducted by telephone and by website. Using the telephone data entry and voice responses, or an Internet website, students can register for all of their courses in a matter of minutes and can access their tuition and fees from the privacy of their own homes. **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. Students using the automatic redial button will always receive a busy signal. Registering in the evening will avoid overloaded circuits.

Students should be aware that phone calls to The Florida State University's interactive telephone network systems for course registration, CLAST registration, Office of Financial Aid or Office of Admissions services, may be periodically monitored to insure that the appropriate quality control is maintained.

Registration Guide and Course Schedules

The Florida State University publishes the *Registration Guide* which includes registration worksheets. The *Guide* also contains a list of all registration deadlines, fee and payment information, and important announcements. A copy of the *Guide* can be obtained from the Office of the University Registrar's information desk (*A3900 University Center*) each term. This information is also published online at the Office of the University Registrar website at at *http://registrar.fsu.edu.*

Lists of course offerings, with the meeting time and location of each course, and where possible the instructor who will be responsible for each course, are made 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 (14) days prior to the first registration window for that semester.

Students are advised to organize their material and plan their schedule before using the registration worksheets in the *Registration Guide*. Students must contact the appropriate departmental office for any clearances or authorization needed. Individual instructors should be contacted for courses requiring "permission of instructor." It is important to take care of any academic or administrative hold ("stop") before calling to register.

How to Find a Course in This *Bulletin*

The "Course Prefixes" section lists course subjects alphabetically by letter prefix. The column to the right contains the department(s) and/or program(s) offering that course subject. The departments/programs can be found, alphabetically, in the "Academic Departments and Programs" section, where each course offered in a given program is listed, including title, description, and credit hours.

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. 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.

Those students who register during late registration (normally the first two days of classes) will be assessed a $100.00 late registration fee.

Registration Permits

All permits, such as underloads, overloads, directed individual study (DIS), and satisfactory/unsatisfactory (S/U) grading must be completed by the end of the fourth week of classes. Most 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

Graduate 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.

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. Failure to meet specific requirements of a University college, school, or department, the judicial office, or the office of special students may induce a registration "stop".

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 will be considered illegally enrolled in the University. If the "stop" is not removed after notification of such an error, the students registration is subject to cancellation.

Registration "Stop" for Outstanding Charges

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" will not be removed and such students will not be permitted to register until the debt is cleared.

Registrar Cancellation of Schedule

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

Student Cancellation of Schedule

A student may cancel registration during the first five 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 fifth day of classes a student cannot voluntarily cancel registration but must apply for withdrawal from the University. 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. Students who cancel their registration must apply for readmission. Students who cancel their registration and are not enrolled for the following term (non-enrollment for two consecutive terms) must apply for readmission.

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 that appear on their schedule after the fourth day of classes. Courses may be dropped through the fourth week of classes; however, tuition charges will remain. Approval by the student's academic dean is required to reduce the academic load below twelve (12) semester hours. Courses dropped during this period will not appear on the student's transcript. To add courses after the first four days of classes requires the academic dean's approval.

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

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] 644-7134*) or hand carry a copy of their orders along with a statement requesting an administrative cancellation to the Administrative Section of the Office of the University Registrar, *A3918 University Center*.

Directed Individual Study Courses

Students may enroll in courses directed by an instructor for individual study of a particular area. The directed individual study course title and credit hours must be approved in writing by the instructor offering the course and the departmental chair, or representative, and will be posted on the student's record.

Florida Agricultural and Mechanical University—The Florida State University Cooperative Program

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. Within the policy of the student's home university, courses taken at the host university must be graded on a satisfactory/unsatisfactory (S/U) basis;

4. The final grade obtained by the student shall be reported directly to the student's home university for entering on the student's transcript. Grades, credits, and quality points are treated as home-institution work;

5. All tuition and fees are paid to the home institution;

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

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 *Graduate Bulletin*.

Interinstitutional Transient Students

State of Florida, Division of Colleges and Universities

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 and application fee 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.

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

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 academic 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 for tuition.

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 will issue 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.

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 release of the transcript. Transcript service may also be denied if 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.

Enrollment Certification

All student certifications will be by official request only. A graduate student whose cumulative grade point average for courses taken at The 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. Students in need of enrollment verification should make a written request directly to: *Certification Section of the Office of the University Registrar, A3900 University Center, Tallahassee, FL 32306-2480,* or go to *http://www.studentsfirst.fsu.edu.* Select "fill out a certification request." Follow the instructions on the screen in order to obtain your certification letter. Your letter will be processed the following business day.

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**, has the right to a response from the Office of the University registrar within thirty (30) days. When the record includes information on more than one student, only the information on the student making the request will be given.

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. (*Faculty Handbook*, p. 188);

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 course work;

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 wishing to do this need to be accepted by both departments. A memo showing endorsement by both department heads and dean(s), as appropriate, must be sent to the Dean of Graduate Studies 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 The 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.

Master's Degree Programs

Degrees Offered

The University confers at the master's level the master of arts, master of science, master of accounting, master of business administration, master of fine arts, master of music, master of music education, master of social work, specialist in education, specialist in library and information studies, and master of public administration degrees.

The minimum requirements stated below govern all of these degrees except the specialist in education, the specialist's degree in library science, and the master of fine arts degrees. Individual departments may have additional or specific requirements over and above those here stated. 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 (30) semester hours of credit including thesis credit. At least eighteen (18) 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 (6) hours.

Course-Type Program. To qualify for a master's degree under this program, the student must complete a minimum of thirty-two (32) semester hours of course work. At least twenty-one (21) of these hours must be taken on a letter-grade basis (A, B, C).

Requirements at Master's Level

The student is held responsible for meeting the requirements listed below.

Graduate Record Examinations and Subject (Advanced) 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 (6) semester hours and transfer of courses not counted toward a previous degree within The Florida State University is limited to twelve (12) semester hours, except when the departmental course requirement exceeds the thirty-two (32) hour University-wide minimum requirement. In the latter case, additional transfer credit may be allowed to the extent of the additional required hours. All transfer credit must: l) be recommended by the major department; 2) be evaluated as graduate work by the evaluation section of the Office of Admissions of The 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 The Florida State University.

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 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 and Minor Professors

At the earliest opportunity, the student should ask the chair of the major department to designate the major professor, who serves as the student's adviser and supervisor. If nine (9) 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. If a minor is requested, the chair of the major department should ask the chair of the minor department to designate a minor professor for the student's supervisory committee. Designation of major and minor professors requires the mutual consent of the student, department chair, and professors involved.

Supervisory Committee

A master's degree supervisory committee must be designated for all thesis students and may be designated for nonthesis students at the option of the department. The supervisory committee consists of at least three members: the major professor; the minor professor (if the student has a minor area); 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 master's directive status.

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.

Thesis

The student must register for thesis credits each term in which a substantial amount of work is being done on the thesis. A student who has completed the required course work and continues to use campus facilities and/or receive faculty supervision but who has not made a final thesis submission shall include in the required full-time load of twelve (12) semester hours a minimum of two (2) thesis hours per term. Those with underload permission must register for at least two (2) hours of thesis credit per term. The exact number of hours shall be determined by the major professor based on the proportion of faculty/staff time, facilities, and other resources needed to support the student.

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. Information on the appropriate form for the thesis may be obtained from the major professor. Formatting and clearance guidelines for the final electronic submission copy may be accessed from the Office of Graduate Studies website, *http://www.fsu.edu/gradstudies*, or by contacting the manuscript clearance advisor.

The final draft of the thesis should be in the hands of the major professor and the examining committee at least ten (10) days before the date set for the oral examination. After approval by the oral examining committee, which includes the supervisory committee, the student should submit the final manuscript electronically to the manuscript clearance advisor. A manuscript processing fee is charged. 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 Office of Graduate Studies.

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 Requirements

In addition to the requirements listed above, candidates for the master of arts degree must meet the following requirements.

1. Proficiency in a foreign language demonstrated by satisfactory performance on the Graduate School Foreign Language Tests of the Educational Testing Service, or certification by the appropriate language department, or completion of twelve (12) 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 (6) 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, doctor of education, and doctor of music degrees in the several departments of the College of Arts and Sciences, College of Business, College of Communication, School of Criminology and Criminal Justice, College of Education, FAMU—FSU College of Engineering, College of Human Sciences, School of Information Studies, School of Music, College of Social Sciences, School of Social Work, School of Theatre, School of Visual Arts and Dance, as well as in several interdepartmental and interdivisional areas. See relevant sections of this *Graduate Bulletin*.

Requirements of the Doctor of Philosophy Degree

The student is held responsible for meeting the requirements listed below.

The doctor of philosophy is a research degree designed to produce the critical scholar. The degree is granted only to students who: l) 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 postbaccalaureate 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.

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 (30) semester hours of graduate work or being awarded the master's degree, the student must be continuously enrolled on The Florida State University Tallahassee campus for a minimum of twenty-four (24) graduate semester hours of credit in any period of 12 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 Graduate Studies. 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 School of Visual Arts and Dance permit EdD students, if they so desire, to complete their residency requirement by registering for thirty (30) credits during a 16-month period.

Course Requirements

Because the doctor of philosophy 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 chair of the department and 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 departmental chair will appoint the major professor who must be a member of the graduate faculty with doctoral directive status and have special competence in the students 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 three members of the graduate faculty who have doctoral directive status, one of whom is a representative-at-large of the graduate faculty drawn from outside the student's department. Additional members may be appointed if deemed desirable. All members of the committee must hold at least master's directive status. **Each year they will assess the progress of the student in writing and will make available copies of their assessment to the student, the departmental chair, and the academic dean.** The Dean of Graduate Studies, the academic dean, and the chair of the major department may attend committee meetings as nonvoting members. Notification of the final committee will be reported to the Dean of Graduate Studies. Nongraduate faculty may assist a student on a supervisory committee, but cannot vote or sign the dissertation.

The graduate faculty representative is responsible for ensuring that University policies are followed, and that decisions made by the supervisory committee reflect the collective judgment of the committee. Therefore, the graduate faculty representative must be someone who is free of conflicts of interest with other members of the committee. If questions arise they should be referred to the Dean of Graduate Studies for resolution.

Program of Study

As soon as possible after notification of the appointment of the supervisory committee, the student, under the supervision of the major professor, should prepare for the approval of the supervisory committee a complete plan of courses to be taken. This program of study must be signed by each member of the committee 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.

Language and Related Requirements

There are no University-wide foreign language, statistics, or other tool requirements for the doctor of philosophy degree. Each department prescribes its own requirements.

The procedures for testing foreign language proficiency are set by the department prescribing the requirements. For those departments choosing to use them, the following arrangements have been made: reading knowledge exemption examinations for French, German, Russian, and Spanish are administered locally by the Office of Assessment Services, *106 William Johnston Building, (850) 644-3017,* using the Educational Testing Service Examinations. Information on dates for application to the Office of Assessment Services and dates for the examinations is available from that office. For those examinations not administered by the Office of Assessment Services, application is made to the appropriate department. 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 course work, and the completion of that course work 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.

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 committee (be it supervisory or examining) 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 Graduate Studies 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 Graduate Studies or on recommendation of the major professor. Normally, the examining committee will be identical with the supervisory committee.

The supervisory or 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 fol-

lowing 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.

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.

Admission to Candidacy

A student who has passed the preliminary examination and has been certified to the Office of the University Registrar (on 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.

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.

The manuscript must be prepared according to the style and form prescribed by the department. Formatting and clearance guidelines for the final electronic submission copy may be accessed from the Office of Graduate Studies website, *http://www.fsu.edu/gradstudies*, or by contacting the manuscript clearance advisor.

The student who has been admitted to candidacy must register for dissertation credits each term in which a substantial amount of work is being done on the dissertation. A student who has completed the required course work and continues to use campus facilities and/or receive faculty supervision but who has not made a final dissertation submission shall include in the required full-time load of twelve (12) hours a minimum of two (2) dissertation hours per term. Those with underload permission must also register for at least two (2) hours of dissertation credit per term. The exact number of hours shall be determined by the major professor based on the proportion of faculty/staff time, facilities, and other resources needed to support the student. The minimum number of dissertation hours for completion of a doctoral degree shall be twenty-four (24) semester hours.

For more specific information on final-term registration, see the residency requirements listed above. Before registering for dissertation, the student should consult the major professor as to the proportion of time to be devoted to dissertation work. The number of hours listed will show the proportion of time to be devoted to dissertation (with twelve [12] semster hours as an indication of full-time status). For example, PHY 6980, four (4) semester hours, will indicate that the student expects to devote one-third of the time to dissertation. 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.

Examination in Defense of Dissertation

The defense of dissertation will be oral. Responsibility for suggesting the time, designating the place, and presiding at the examination rests with the major professor. The examination must be completed at least four weeks prior to the date on which the degree is to be conferred.

Academic courtesy requires that a preliminary draft of 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 Office of Graduate Studies. Consult the *Registration Guide* for the deadline dates.

The content of the abstract of the dissertation should be submitted to the supervisory committee at least one week before the date of the defense examination for approval. The abstract should conform to appropriate examples in *Guidelines and Requirements for Electronic Thesis, Treatise, and Dissertation Writers.*

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.

A written critique of the conduct of the examination in defense of dissertation should be submitted by the representative-at-large from the graduate faculty to the appropriate academic dean and the Dean of Graduate Studies within one week after the date of defense.

After approval by the oral examining committee, the student should submit the final manuscript electronically to the manuscript clearance advisor. A manuscript processing fee is charged.

Publication of Dissertation

Publication of the dissertation through standard media for scholarly work is encouraged. As a condition of undertaking a doctoral program, the student agrees that the completed dissertation or treatise will be archived in the University Libraries system. The student will make the electronic dissertation or treatise available for review by other scholars and the general public by selecting an access condition provided by the Office of Graduate Studies.

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 advisor will be sent to University Microfilms International, Inc. The abstract will be published in Dissertation Abstracts International and the dissertation will be microfilmed, for which the student is charged a fee. 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 The 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:

1. The maximum delay in the release of a thesis or dissertation to the University library and University Microfilms International shall not exceed three (3) months from the date the thesis or dissertation is accepted in its final form in the Office of Graduate Studies. A request for such a delay must be presented in writing to the Dean of Graduate Studies and carry the endorsement of the student, the major professor, the department or program chair and the dean of the relevant college or school;

2. 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;

3. In special circumstances, the Dean of Graduate Studies may grant an additional delay of sixty (60) days upon a request of the concerned parties, if the case can be made that such a delay is in the best interests of the student and the University. Such a request must be received at least one month prior to the expiration of the original period of delay.

Research Supported by Business and Industry. A thesis or dissertation which has been fully or partially supported by business or industry, may be sequestered by the Office of Graduate Studies

for no more than two months while the document is being reviewed by the sponsor for patentable material, and if necessary, while a patent application is being filed. A request for sequestering should be accompanied by a copy of the contract governing the terms under which the research was supported and be endorsed by the Office of the Vice President for Research, the major professor, and the student.

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 Office of Graduate Studies.

Requirements of the Doctor of Education Degree

The doctor of education degree is offered by the College of Education, the School of Music, and the School of Visual Arts 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 doctor of education degree is further distinguished from the doctor of philosophy 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 doctor of education and doctor of philosophy degrees cannot be made solely on the basis of research tool requirements. Depending on the dissertation project proposed, the candidates 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 doctor of education degree that differ from those leading to the doctor of philosophy degree.

Requirements of the Doctor of Music Degree

The doctor of music 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 "School of Music" 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. In addition there are usually other departmental requirements which must be met.

Faculty Academic Judgement

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 judgement 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 judgement 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, and shall consist of a minimum of one (1) credit hour of thesis/dissertation/treatise credit even if the student has completed the requirements for the degree in previous semesters. This is to reimburse the University for the administrative costs of manuscript clearance and final degree clearance procedures. If a nonthesis student needs only to complete the comprehensive examination in a term and did not register for the examination in the previous term, registration must be requested from the Office of the University Registrar stating department and name of examination, and 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 Thesis, Treatise, and Dissertation Writers may be accessed from the Office of Graduate Studies website, *http://www.fsu.edu/gradstudies* or by contacting the manuscript clearance advisor.

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.

At the Office of the University Registrar a 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. For a candidate in a course-type (non-thesis) program, the form must be completed and submitted to the academic dean. For a thesis, dissertation or treatise-writing student, the form must be completed and submitted to the manuscript clearance advisor in the Office of Graduate Studies. No candidate is eligible for the degree until this requirement has been met.

After the defense, a master's or doctoral candidate must submit to the manuscript clearance advisor the completed "Final Degree Clearance Form;" the electronic thesis, treatise or dissertation; one original signed signature page; the "Electronic Access Agreement Form;" the "Student Information Form;" and two copies of the manuscript title page. For additional requirements related to master's and doctoral students, and for a complete list of materials to submit to the Office of Graduate Studies, students may access the Office of Graduate Studies website, *http://www.fsu.edu/gradstudies*, or contact the manuscript clearance advisor. Consult the *Registration Guide* for the deadline dates.

Additional requirements may be imposed by individual programs or departments.

ACADEMIC REGULATIONS AND PROCEDURES

Academic Honor System

A major concern of any educational institution, ranking with its concern for the advancement and dissemination of knowledge, is the maintenance of high standards of integrity and responsibility in the academic community. The Florida State University recognizes the responsibility of both faculty and students in developing and maintaining these standards.

The legal foundation for the coordinated efforts of faculty and students to uphold academic integrity and combat academic dishonesty is provided in the Student Conduct Code (Section 1006.60, Florida Statutes and Florida Board of Governors Rule 6C-6.0105), which can be found in the *Florida State University Student Handbook.*

Academic Honor Code

The academic honor system of The Florida State University is based on the premise that each student has the responsibility to:

1. Uphold the highest standards of academic integrity in the student's own work,

2. Refuse to tolerate violations of academic integrity in the University community, and

3. Foster a high sense of integrity and social responsibility on the part of the University community.

Violations of the Academic Honor Code

1. During examinations, violations of the Academic Honor Code shall include referring to information not specifically condoned by the instructor. It shall further include receiving information from a fellow student or another unauthorized source.

2. Regarding academic assignments, 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. It shall also include presenting or submitting any academic work in a manner that impairs the instructor's ability to assess the student's academic performance. For example, plagiarism includes failure to use quotation marks or other conventional markings around material quoted from any source.

3. Violations of the Academic Honor Code shall include obtaining, distributing, or referring to a copy of an examination which the instructor/department has not authorized to be made available for such a purpose.

4. Violations of the Academic Honor Code shall include any act which impedes the ability of other students to have fair access to materials assigned or suggested by the instructor. For example, removal or destruction of library or other source materials violates the Academic Honor Code.

5. Academic dishonesty shall include tampering with another student's work or impairing in any way the instructor's ability to assess the academic performance of another student.

6. Violations of the Academic Honor Code shall include alteration of grades or any other records related to the academic performance of students. This shall also include submitting any false records in order to gain admission to the University.

7. Violations of the Academic Honor Code shall include assisting, attempting to assist, or conspiring to assist another student in committing the offenses as outlined above.

8. Violations of the Academic Honor Code shall include attempting to commit any offense as outlined above.

Student Responsibility

1. Each student shall be responsible for abiding by the Academic Honor Code at all times. If required by the instructor, at the conclusion of each examination or submission of an assignment, each student shall sign a pledge that the student has neither given nor received aid from any unauthorized source during the examination or in preparing the assignment.

2. Any student who violates the Academic Honor Code is expected to report the violation to the instructor and/or the University judicial officer.

3. If a student observes cheating during an examination, the student should consult with the instructor of the course as soon as reasonable so that the cheating may be stopped. If a student otherwise observes or learns of another student's violation of the Academic Honor Code, the student shall either 1) ask the student to report the violation to the instructor of the course and/or the university judicial officer, or 2) report the violation to the instructor of the course and the University judicial officer. In the event that a student asks another student to report himself/herself and such student does not do so, then the student shall report, as soon as practicable, the violation to the instructor of the course and/or the University judicial officer. The student should provide the name of such student or students involved, if known, and furnish such evidence as is available to support the charge.

Faculty Responsibility

1. Any instructor may require the students to sign a pledge at the conclusion of each examination stating that they have neither given nor received aid from any unauthorized source during the examination.

2. An instructor may further define in writing the instructor's specification of the acts which shall constitute a violation of the Academic Honor Code as set forth in Section 6b. The definition shall be explained to each class and shall be effective thereafter for that class.

3. When an instructor believes that a student has violated the Academic Honor Code in one of the instructor's classes, the instructor should discuss the matter with the student. The instructor and student may resolve the problem in a manner acceptable to both. The instructor may consult with or invite the participation of the department chair or dean in the effort to reach an acceptable agreement with the student. The student may discuss the appropriateness of any academic response with the instructor's department chair or dean. Any agreement involving an academic penalty shall be put in writing, signed by both parties concerned, and reported by the instructor to the chair or dean and, for information only, to the University judicial officer. The student shall not be further penalized based on this report alone.

4. If a satisfactory resolution is not reached at the departmental level, the instructor shall refer the matter to an Academic Honor System Hearing Panel. These panels shall consist of five members: one faculty member from the department (school) concerned and appointed by the chair (dean), one faculty member not from the department concerned but appointed by the Dean of the Faculties, and two students appointed through procedures established by the Student Senate. The panel shall be chaired by the Dean of the Faculties or designee, who shall vote only in case of a tie. Procedures of this hearing panel shall be in compliance with Florida Board of Governors Rule 6C-6.0105. The University judicial officer may sit as an ex officio nonvoting member of the hearing panel. The decision of this panel shall be final with respect to the student's guilt or innocence and the appropriate academic penalty, if any. The student shall have the right to continue in the course during the hearing procedures. Should no determination be made before the end of the term, the instructor shall record an appropriate grade to reflect the situation until a final decision is made.

5. The chair of the Academic Honor System Hearing Panel shall be responsible for reporting the decision to the student, the instructor, and the University judicial officer; the latter shall determine whether further action should be taken under the Academic Honor Code.

Academic Penalties

Academic penalties shall include but not be limited to one or a combination of the following: 1) a lower or failing grade in the course, 2) a lower or failing grade or score on the assignment or examination, or 3) additional work to provide evi-

dence of the student's academic performance and/or evidence that the student knows and understands the course material.

University Judicial Officer Responsibilities

1. The University judicial officer shall explore the circumstances and determine whether, in the light of the severity and frequency of the student's violations of the Academic Honor Code, any disciplinary penalty should be imposed. The student may elect a hearing before the Student Supreme Court.

2. The University judicial officer shall determine, with advice from the Student Supreme Court, appropriate disciplinary penalties for students found guilty of violations of the Academic Honor Code.

3. In all cases referred to the Student Supreme Court, the University judicial officer shall submit the report from the chair of the Academic Honor System Hearing Panel and a record of the student's history regarding academic integrity. The University Judicial Officer shall report the disposition of each case to the student, to the Dean of the Faculties, and to the instructor involved.

Student Supreme Court Responsibilities

1. The Student Supreme Court shall be responsible for hearing all cases brought before it by the University judicial officer. These proceedings shall be conducted in accordance with the guidelines in the Student Conduct Code and other applicable University guidelines.

2. The Student Supreme Court shall, in the light of information concerning this violation and the student's entire history regarding academic integrity, hold hearings to determine a recommended disciplinary penalty in accordance with the procedures of the court.

Penalties

The following are the possible disciplinary penalties for violation of the Academic Honor Code, and they may be imposed singularly or in any combination.

1. **Dismissal:** An indefinite separation from the University. In order to be readmitted, a student dismissed for disciplinary reasons pursuant to the Academic Honor Code must file a petition for judicial clearance with the University judicial officer who will present the petition to the Honor System Committee for review and decision about whether or not the student shall receive a judicial clearance. All students who receive a judicial clearance will be permitted to return to the University on a probationary basis if the student has also met applicable readmission criteria.

2. **Suspension:** A separation from the University for a specified period of time, not to exceed two years. During the period of suspension, a student is excluded from classes and all other University privileges or activities. At the conclusion of the period of suspension, the student will be permitted to return to the University on a probationary basis if the student has also met applicable readmission criteria.

3. **Probation:** A conditional retention of student status until the student graduates from the University or is separated from the University for a period of not less than four years. During the period of the probation, a student's University privileges may be restricted at the discretion of the University judicial officer.

4. **Reprimand:** A written statement from the University judicial officer expressing disapproval of conduct.

5. Nothing in this code shall preclude the imposition of other reasonable sanctions or a combination of sanctions within the authority and discretion of the appropriate tribunal.

6. Disciplinary records shall be maintained under the auspices of the Vice President for Student Affairs.

Honor System Committee

An Honor System Committee shall be appointed by the University President. The committee shall consist of three faculty selected from a list of six provided by the Faculty Senate Steering Committee and three students selected from a list of six provided by the Student Senate. Student members shall be appointed to serve terms of one year and faculty shall be appointed to serve terms of three years. The committee shall keep students and faculty informed concerning the provisions of the Academic Honor System, monitor the operation and effectiveness of the Academic Honor System, and make recommendations to the Faculty Senate and the Student Senate that it may deem appropriate.

Amendment Procedures

Amendments to the provisions of the Academic Honor System may be initiated by the above named committee, by the Faculty Senate, the Student Senate, or by the Vice President for Academic Affairs. Amendments to the Academic Honor System must be approved by the Faculty Senate and the Student Senate. After approval, amendments shall be forwarded to the University for implementation.

General Academic Appeals Process

Grievance Procedure

Students who feel 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. After following this procedure if graduate students have not resolved their complaint, they must see the Dean of Graduate Studies prior to meeting with the Dean of the Faculties. 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 direct, through the Vice President for Academic Affairs, that corrective action be taken when justified.

Grievance Procedure - Panama City Campus

Students who feel 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. After following this procedure if graduate students have not resolved their complaint, they must see the Dean of Graduate Studies prior to meeting with the Dean of the Faculties. 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 direct, through the Vice President for Academic Affairs, that corrective action be taken when justified.

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, which 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, or support staff position (including law enforcement unit 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 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 The 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.*

Release of Student Information

The disclosure or publication of student information is governed by the policies of The Florida State University and the State Board 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, or support staff position (including law enforcement unit 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 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 fullfill his or 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 student is notified in advance of University's compliance; and/or
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 which are exempted by law including records of law enforcement agencies of the University; employment records of the student within the University; 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.

More specific information regarding such exempted information can be obtained from 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, 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;
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 their 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.

Notification to the University of a request to prevent publication or release of "Directory Information" via the University must be received prior to the first class meeting day of the fall semester of the academic year. Once received, that request will remain in effect until notification to the contrary, in writing, is received 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 or 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 awards 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: *The University Registrar, Office of the University Registrar, A3900 University Center, The Florida State University, Tallahassee, FL 32306-2480.*

Class Attendance

All students are expected to abide by the class attendance policy set forth by the instructor in each class in accordance with Section 8.6 of the *Faculty Handbook*. Any arrangement to make up work because of class absence is the responsibility of the student. The instructor, who will explain the grading policy at the beginning of the term, determines the effect of absences upon grades. Students reported absent for a period of two weeks or more may be readmitted only by permission of their academic dean. Upon readmission the dean may require a reduction of the academic load. 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 fourth 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.

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 athletes' 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 and nursing majors. Membership within these units implies that the student agrees to fulfill the obligations of the organization.

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 feel 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 direct, through the Vice President for Academic Affairs, that corrective action be taken when justified. Consult the 'General Academic Appeals Process' section of this chapter for a complete description.

Classification of Students

Students are classified as follows:

Graduate, any student admitted to a graduate program, classification 5;

Special Non-Degree Seeking without Baccalaureate Degree, classification 6;

Special Non-Degree Seeking with Baccalaureate Degree, classification 7;

Provisional, classification 8; and

Transient, classification 9.

Special (Non-Degree Seeking) Student Regulations

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

1. Special students may enroll for fewer than twelve (12) hours (underload) without permission;

2. In place of the retention schedule system for regular students, special students must meet the following requirement. After attempting twelve (12) semester hours, graduate special students must have achieved and must maintain a 3.0 ("B") grade point average in all courses attempted;

3. Failure to achieve or maintain the appropriate grade point average will result in a loss of registration privilege; refer to 'Reclassification from Special Student to Regular Student Status' below for additional information.

4. Special students may register for any course or courses on an S/U basis. Special 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.

Reclassification from Special Student to Regular Student Status

Postbaccalaureate special 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 special student carries no degree credit. Up to twelve (12) semester hours earned as a graduate special student may be applied toward a graduate degree with approval of the appropriate department chair and dean at the time of reclassification provided that a grade of 3.0 ("B") or better has been achieved.

Full-Time Student Course Load

Recipients of stipends from the University, whether holders of fellowships or assistantships, must be full-time students.

The University reserves the right to determine full-time status based on course and/or research load. Special students are not required to obtain an underload permit.

Twelve (12) semester hours per semester constitutes a full-time load for graduate students and fellowship holders. A student who wishes to register for fewer than twelve (12) semester hours must have written approval from the academic dean prior to registration.

Nine (9) semester hours is defined as a full-time load for graduate assistantship holders on a quarter-time appointment or larger. 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 satisfy the residence requirement, however, a doctoral student must be enrolled for twenty-four (24) semester hours during any period of 12 consecutive months.

The number of hours which a graduate student may carry without special permission is fifteen (15). A heavier load may be permitted by the academic dean.

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

Included in the calculation of student load are hours of graduate credit other than formal course work, e.g., hours in thesis or dissertation, in directed individual study, in supervised research, and in supervised teaching.

Faculty Degree Candidates

A faculty member of The Florida State University holding rank higher than that of instructor may not under any circumstances be a candidate for or receive a graduate degree from The Florida State University.

Course Examinations

Final examinations in undergraduate courses are discretionary within any given department, but all students, including graduate students, enrolled in an undergraduate course having a final examination are required to take the examination. The

scheduling of a final examination, or a test in lieu of a final examination, at any time other than the regularly scheduled final examination period is a violation of 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*. If no final examination is scheduled, a test in lieu of the examination may not be given during the last week of classes but must be given during the final examination period at a time other than that which appears online at *http://registrar.fsu.edu*.

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 appropriate academic dean.

Grading System

Definition	Grade	Quality Points Per Hour Credit
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	0.00
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	0.00
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 The 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 graduate studies, some graduate course work taken at The 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 The Florida State University; or

2. A student has earned a master's/specialist degree from The 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 Graduate Studies 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 (6) semester hours during the master's degree program or up to nine (9) 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 four weeks of a term. 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 via The Florida State University and the FSyou! Website. Grades may be obtained by dialing *(850) 644-8888* and selecting option 2 followed by the student's social security number and four-digit registration PIN, or by accessing the website at *http://www.ais.fsu.edu/edu/ais/applications/student.*

Grades earned at another institution cannot be used to improve a grade point average or eliminate a quality point deficiency at The 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, with the permission of the instructor, be assigned a grade of "I". 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" compute as an "F" in grade point average calculations. 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 incomplete grades ("I") or no grade ("NG") have been received. If they do so, the original "I" or "NG" will automatically be changed to "F". This "F" grade is not repeatable under the forgiveness policy 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 which 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.

Once a final grade in a course has been reported by the instructor to the Office of the University Registrar, it cannot be changed 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 or school.

Grade Appeals System

Graduate students may appeal grades they think have been inequitably awarded.

The purpose of the grade appeals system is to afford an opportunity for a graduate student to appeal a grade the student feels was inequitably awarded, in that it involved a gross violation of the instructor's own specified grading standards (which the instructor has an obligation to announce at the beginning of the course). The student may appeal the grade in the following manner.

Step 1.

The student must approach the instructor in question to discuss the grade and attempt to resolve any differences. A student not in residence for the succeeding term or a resident student who is unable to resolve the differences with the instructor must file an appeal with the instructor's program or department chair, whichever is appropriate, within 60 days following the assignment of the disputed grade.

Step 2.

If still dissatisfied, the student may, after filing a written statement with the program or department chair explaining the basis for the appeal, appear before a board composed of three students nominated by the program or departmental student advisory committee or its counterpart. A negative decision by the board will end the appeal. A favorable decision will be referred to the departmental board described in Step 3. The student advisory board acts as a screening body and determines solely whether the appeal is consonant with the criteria indicated above. The student advisory board must be appointed and its decision made within three weeks of the time that the written statement has been filed with the program or department chair.

Step 3.

A department board composed of three faculty members and two students appointed by the chair must be selected for each case. The departmental board must be appointed and its decision made within three weeks of the time the student advisory board has reached a favorable decision on the grade appeal. A unanimous decision shall be final and binding on all parties concerned. A majority opinion may be appealed by the student or the faculty member to a college-wide board appointed by the dean of the college from nominees supplied by the faculty and student advisory committees respectively. The appeal from the decision of the departmental board must be made by the dissatisfied party within three weeks of the time that decision has been made. The college-wide board must be appointed and its decision made within three weeks of the time that the written appeal has been filed with the dean of the college. The majority decision of this college-wide appeal body shall be final and binding on all parties concerned.

Each committee and board is charged with hearing the instructor in question, if the instructor wishes.

Faculty Senate Committee on Student Academic Relations

The Faculty Senate committee on student academic relations hears appeals from students concerning decisions about their academic work which they believe 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 Dean of the Faculties. Appeals to this committee are made after all other available remedies have been exhausted.

Forgiveness Policy

A graduate student may repeat one time a course in which a grade of "C+" (2.25) or lower has been made. The course shall be repeated on a letter-grade basis. Only the grade and credit received in the second attempt shall be used in computing the overall grade point average. However, the original grade will remain posted on the student's permanent record, but will not be used in computing the overall grade point average. A student may repeat no more than two courses under this rule, and no course in which a grade of "B–" (2.75) or above was received may be repeated to improve the grade. If this *Graduate Bulletin* specifically allows additional credit for repetition of a course, each repetition shall be used in computing the grade point average unless the student has prior permission from the Dean of Graduate Studies to take the course to improve the grade. Grades earned at another institution cannot be used to improve a grade point average or eliminate a quality point deficiency at The Florida State University.

A student is required to submit to the Office of the University Registrar a forgiveness repeat request using the FSyou! website at *http://www.studentsfirst.fsu.edu* or the signed form for grade forgiveness by the midterm date of that term in which the course is being repeated. At any time prior to that midterm date, the student may also submit a written request to cancel the signed form for grade forgiveness for that course, but no change will be allowed after the midterm date.

Suspension, 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.

A graduate student whose cumulative grade point average for courses taken at The 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 special student. However, at that time the major professor may petition the academic dean and the Dean of Graduate Studies for consideration of special circumstances which 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.

Readmission

Returning students who l) have been dismissed (and have been reinstated) from the University and have not been enrolled for one term or more (including the summer term); 2) withdrew or canceled their registration during a previous term of attendance; or 3) have been out of school for two or more consecutive terms (including the summer term) must submit an application for readmission to the readmissions section of the Office of Admissions. This application must be submitted at least 60 days prior to the beginning of the term for which readmission is desired. (Consult the "University Calendar" chapter of this *Graduate Bulletin* for specific application deadlines.) Readmitted former students are subject to retention requirements in effect at the time of reentrance. Students claiming classification as Florida residents must also reestablish their eligibility for this classification when applying for readmission.

Any student who attempts college work at any institution other than The Florida State University (including correspondence work) must have official transcripts sent to the readmission section of the Office of Admissions. Official transcripts issued directly to students are not acceptable for evaluation and entrance requirements. **The University reserves the right to refuse readmission to any student who has an unsatisfactory academic, conduct, or health record.**

Students who are denied readmission to the University may appeal that decision by filing a written petition with the Dean of Graduate Studies.

Withdrawal from the University

All students, including regular (degree seeking), special (non-degree seeking), and all State of Florida, Division of Colleges and Universities system transient students, who wish to leave the University during 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 four 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 unusual circumstances and upon recommendation of 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 five 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 five 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 The Florida State University.

Students receiving financial aid may have to pay back a portion of that aid depending upon the date of withdrawal.

Should a student wish to register at the University at a later date, a formal application for readmission must be made at least 60 days prior to the beginning of the term in which the student wishes to re-enroll (see 'Readmission' above).

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

Medical Withdrawal

When a student has been granted more than one medical health withdrawal, the Medical Withdrawal Committee will send a letter to the student noting that further withdrawal requests may not be considered. The student is requested to evaluate with their medical provider the number of hours they are capable of handling prior to registration.

FACTS Information

A new service is now available to all current and prospective students of higher education in the state of Florida, the FACTS (Florida Academic Counseling and Tracking for Students) website. By logging on at *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;
- apply to more than one university or college by entering in your data just one time;
- get questions answered about financial aid;
- plan your course of study, compare majors and degree requirements;
- get a copy of your unofficial transcript;
- investigate career options through your institution's career center; or
- find out general information about every participating college or university in the program.

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 (3) semester hours of supervised research credit and three (3) semester hours of supervised teaching credit may be counted toward the master's degree. The limit for candidates for doctoral degrees is five (5) 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 (1) credit hour for each week of the program, provided that each week contains the equivalent of fifteen (15) contact hours. In no case shall credit be given for any short course or institute or similar program having a duration of less than two full weeks.

Individual Study Courses

A student registered for an individual study course must attend at least one conference a week on the campus. Directed individual studies are not permitted during an intersession period. The graduate-level directed individual study (DIS) is for S/U or letter-grade credit at the discretion of the department.

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.

STUDENT SERVICES

The Florida State University seeks to provide students with opportunities outside the classroom that will stimulate social and cultural awareness, physical well-being, intellectual expansion, and spiritual and moral growth. The University wishes to address the needs of the total student. And with that perspective, the University is committed to creating a sense of community among students, faculty, and administrators that will extend to the public, whether in the state, nation, or other countries.

Division of Student Affairs

Vice President for Student Affairs:
Mary B. Coburn;
Associate Vice President for Student Affairs:
Timothy Quinnan;
Associate Vice President for Student Affairs:
TBA

The goal of the Division of Student Affairs is to ensure all students are able to take advantage of the formal and informal educational experiences offered by The Florida State University. The Vice President for Student Affairs and the staff are responsible for the following departments:

- Campus Child Care:
  - Alumni Village Child Development Center
  - Educational Research Center for Child Development
  - Starlight Childcare Center
- Campus Recreation
- Career Center
- Center for Academic Retention and Enhancement (CARE)
- Center for Civic Education and Service
- Dean of Students Department
  - First-Year Experience (FYE)
  - Greek Affairs
  - Orientation
  - Sexual Harassment Reporting and Education
  - Student Disability Resource Center
  - Student Rights and Responsibilities
  - Victim Advocate Program
  - Withdrawal Services
- International Center
- Office of Multicultural Affairs
- Oglesby Union
  - Flying High Circus
  - Organization and Leadership Services
  - Student Campus Entertainment
- Student Counseling Center
- Student Government Association
  - Center for Participant Education
  - Congress of Graduate Students
  - FSU First Responder Unit
  - Off-Campus Housing
  - SAFE Connection
  - Student Legal Services
  - Student Publications
  - Women's Center
- Thagard Student Health Center
  - Partnership for Alcohol Responsibility (PAR)
- University Housing

Some of these departments and their programs are discussed below; however, for more complete information, refer to *The Florida State University Student Handbook*. 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:

- Evaluation Services
- Food Services
- Parking and Bus Services
- Postal Services
- Public Safety
- Radio and Television
- Sports

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

Career Center

The Career Center, located in the *University Center, A4100*, helps students in all phases of their career development. The center's **Curricular-Career Information Service** unit helps students explore their skills, interests, and values and select appropriate academic programs and occupations to reach their career goals. The center's career library provides students access to both computer-based and print career assessment and information resources. The **Career Experience Opportunities Program** helps students explore career choices through various preprofessional internships and cooperative education work experiences. Students nearing the end of their academic programs find help in the **Career Placement Services** unit that administers the on-campus recruitment program and helps students develop effective job search techniques. Placement services are offered also through the Career Center in the colleges of Business and Engineering. For further information regarding Career Center programs and services, please visit our website at *http:// www.career.fsu.edu.*

Child Care

The **Educational Research Center for Child Development** provides care and educational experiences for a limited number of children from ages 6 weeks to 5 years. Children of Florida State University students are given priority for enrollment. Space is limited, so please apply early.

The center is also a site for research by faculty members and graduate students in the areas of early childhood education and child development. In addition, it provides a laboratory setting in which students may observe or work with young children. For additional information, contact *Educational Research Center for Child Development, Division of Student Affairs, 370 Hull Drive, Tallahassee, FL 32306-4410, (850) 644-1013*; website: *http://www.fsu.edu/~staffair/child.*

The **Alumni Village Child Development Center**, located in the University's family and graduate housing area, provides, for a fee, an educational child care program for children 2 1/2 to 5 years of age. Space is limited, so please apply early. A free after-school program is provided for residents of Alumni Village. This program operates Monday through Friday from 3:30 p.m. to 5:15 p.m. For additional information, please call *(850) 644-8305*.

The **Starlight Child Care Center** provides evening care for children ages three to eleven from 3:15 p.m. to 10:15 p.m. Monday through Thursday. Children of Florida State University students and faculty/staff will be accepted. Space is limited, so please apply early. For additional information, please call *(850) 644-3096.*

Community and Public Service

The Florida State University encourages students to become involved in community service and to broaden their academic experience through service learning courses. The University recognizes outstanding service through the President's Humanitarian of the Year Award. The Florida State University participates in **Campus Compact** and hosts **Florida Campus Compact** and the **Florida Learn and Serve**, all of which have as their purpose the promotion of student involvement in the community and the advocacy of the importance of civic responsibility in student learning.

Center for Civic Education and Service

At The Florida State University, community involvement and civic responsibility are integral elements of a liberal arts education. The **Center for Civic Education and Service** promotes this vision by providing service opportunities for both students and faculty. The center operates a clearinghouse of service-related information, including a directory of service organizations in the community, a listing of classes that feature service-learning components, and a listing of student organizations that focus on service to the community.

The center administers the ServScript program at FSU. This one-of-a-kind program allows FSU students to record their hours in service to the community on their official academic transcript. Their transcript is a direct reflection of their college career to potential employers, and graduate and professional schools.

The center also coordinates, advises, and supports many projects and programs related to service. Each Fall and Spring semester, students are trained as **America Reads** tutors and placed in area elementary schools. Each Fall, the center coordinates a volunteer fair and an **Into the Streets** service project. In the Spring, projects include **Make a Difference Tallahassee**, **Bowl Service Day**, and the **Nonprofit Careers Exposition**. The **Alternative Break Corps**, **International Medical Outreach,** and the **FSU Service Corps** are student organizations that are advised by the center. The Alternative Break Corps coordinates service trips during Spring Break to cities around the country. Participants eat, sleep, and work in the community they visit. The FSU Service Corps coordinates one-time projects while providing student leadership for many on-going service programs. The center continues the Florida State University tradition of working with the predominantly Hispanic community in Gadsden County by supporting the **Panhandle Area Education Consortium/Migrant Education Program**. There are also many partnerships with urban agencies working with children, adults, and the elderly in Leon County. For additional information, contact: *Center for Civic Education and Service, Division of Student Affairs, 930 West Park Avenue, Tallahassee, FL 32306-4180; (850) 644-3342*; Fax *(850) 644-3362*. Website: *www.fsu.edu/~service*; email: *service@admin.fsu.edu.*

Assessment Services

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

StudentsFirst

StudentsFirst is a walk-up service and information counter located on the ground floor lobby of the *University Center Building A.* Students can ask questions about Financial Aid, Registration, Fee Payments, Admissions, and more. StudentsFirst staff will assist students and direct them to the office and personnel who can handle their specific problems. Students can also use StudentsFirst self-service kiosks to find and print a variety of information. Some of the services include: semester grades, unofficial transcripts, class schedules, and student financial status. You can also change your address. Please visit our website at *http://www.studentsfirst.fsu.edu* or come visit us at our service center.

Food Service

Sodexho Marriott Services manages the following food facilities located in the Union and throughout the campus: Crossroads Café, Gourmet Bean, Freshens Yogurt, Cyberwraps, Summit Subs, Stone Willy's Pizza, 2 Chick-Fil-A, Burger King, Pizza Hut Express, Bagel Basket, SubCity, Barristers, Food Court, and The Corner Grocery. The various locations and meal hours provide students with convenience and the freedom from cooking or finding restaurants. Several different affordable meal plans are available, including an all-you-can-eat option at the Union Crossroads Cafe. Balanced menus ensure finding healthy food items that meet dietary requirements. The food service office is located on the ground floor of the Oglesby Union, or may be reached by writing: *Sodexho Marriott Services, P.O. Box 67018, The Florida State University, Tallahassee, FL 32313.*

Health Care

All students are encouraged to check out the Thagard Student Health Center website at: *http://www.tshc.fsu.edu* for more complete information, or call *(850) 644-6230.*

Thagard Student Health Center provides primary out-patient medical care to students and their dependents 13 years and older. Currently enrolled, fee-paying students are not charged for office visits. Additional services such as procedures, lab, x-ray, pharmacy, and physical therapy are provided at less than market rates. Services include urgent care, general medical care, gynecology, psychiatry and allergy clinics, immunization, nutrition, health enhancement, anonymous HIV testing, lab, x-ray, pharmacy and physical therapy.

Thagard's clinical staff includes board-certified physicians, psychiatrists, advanced registered nurse practitioners and registered nurses. The health center has over 80 full-time employees and 50 part-time and student staff members.

All students are encouraged to have insurance coverage. International students with F-1, F-2, J-1 or J-2 visa status **must** meet federal and state mandates and have insurance coverage. The Florida State University offers a reasonably priced policy that meets these requirements. All students are encouraged to visit our insurance office to obtain information about available policies, check out our website, or call *(850) 644-4250.* Medical care outside the health center facility is the financial responsibility of the student.

All students must meet State Board of Education immunization requirements. Health history forms are mandatory for all registered students.

If students are interested in joining a student organization that can make a difference, consider Thagard's Student Health Advisory Resource and Education Team. This committee meets at least once a month to make recommendations and give opinions to the administration regarding health center policies and the needs of our students.

Thagard Student Health Center sponsors the **(Partnership for Alcohol Responsibility) PAR** project to work with community representatives toward changing campus culture regarding alcohol and how it is marketed to the Florida State University community. PAR is funded by the Robert Wood Johnson Foundation and the Harvard School of Public Health Study.

Counseling Services

The **Student Counseling Center**, a department in the Division of Student Affairs, provides counseling programs and services to help students maintain or achieve a healthy state of mind, enabling them to function academically to the best of their ability. Individual counseling is offered on a time-limited basis; group counseling is unlimited. These services are available to all fee-paying FSU students and to TCC students who purchase a health card. Students who are aware that they will require long-term treatment are encouraged to make arrangements for such care before entering the University; however, the Student Counseling Center's staff will make referrals for ongoing treatment in the Tallahassee community, if necessary. Treatment outside the center will be at the student's expense. Initial visits are by appointment, except in cases of emergency. Records of visits to the Student Counseling Center are strictly confidential and are not included in the student's University records. Information concerning use of the center will not be released to anyone without written permission from the student involved unless there appears to be clear and present danger to the student or others. Outreach programs on a number of topics are available to faculty, staff, residence halls, sororities and fraternities by contacting the center.

The Student Counseling Center is located in the *Student Life Building, Suite 201*. During Fall and Spring semesters hours of operation are Monday through Thursday, 8:00 a.m. to 6:00 p.m.and Fridays, 8:00 a.m. to 5:00 p.m.

During the summer, the hours of operation are Monday through Friday 8:00 a.m. to 5:00 p.m. To make an appointment, call *(850) 644-2003* or come by the center. The Student Counseling Center is accredited by the International Association of Counseling Services.

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. Fees for assessments are a 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* or come to the *Regional Rehabilitation Center Building, 2nd floor*. 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 *Graduate Bulletin*.

International Center

The **International Center (IC)** staff provides immigration and support services to international students, scholars, faculty and staff. IC advisers counsel students and scholars as to their obligations under the Department of Homeland Security (formerly Immigration and Naturalization Service) and United States Department of State rules, and serve as liaisons between them and these agencies.

The IC also serves international students, visiting scholars, and their families by orienting them to the University and the community, and providing them counseling and referral in personal, social and financial matters. In addition, the IC offers programs that promote cultural awareness and understanding.

The center sponsors and encourages international programming throughout the campus. Ongoing programs sponsored through the center are the following: **International Friends Program**, a program that links international students with community people; **Small World Speakers Bureau**, a service that arranges for international students to speak on campus and in the community; **Global Gatherings**, a weekly brown-bag discussion series on international topics; the **International Women's Group**, a social support group for wives of international students; and the **International Bazaar**, an annual event featuring food, cultural displays and performances.

Beyond Borders: International Service and Cultural Exchanges with the University of Costa Rica, the University of the West Indies and the Technical University-Dresden (Germany) are also administered through the center. The International Center is located at *107 South Wildwood*. Call *644-1702* or consult the IC website: *http://www.fsu.edu/~fsu-isc* for information.

Center for Academic Retention and Enhancement (CARE)

The Florida State University is committed to recruiting, retaining, and graduating first generation college students who demonstrate a strong potential for success, but who may otherwise not have the opportunity to attend college due to economic, educational, or cultural circumstances. The Center for Academic Retention and Enhancement was established to help fulfill these goals.

The Center for Academic Retention and Enhancement (CARE) administers both, undergraduate and pre-collegiate programs. The center 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 promotes a caring environment for students to discuss their academic, personal, and/or social concerns with a friendly, supportive staff.

Pre-Collegiate Programs

College Reach Out Program is a state-funded program established to identify, motivate, and prepare disadvantaged middle and high school students to complete post-secondary education.

University Experience Program provides disadvantaged high school students interested in furthering their education an opportunity to experience college life for two weeks during the summer.

Upward Bound Program (located at James A. Shanks High School in Quincy, Florida) is a federally-funded program that serves high school students from low socio-economic backgrounds. The UBP staff helps students develop academic skills, encourages them to complete high school, and assists them in pursuing their formal education at the college or university of their choice.

Collegiate Program

CARE maintains a **Summer Bridge Program** whereby a maximum of 300 disadvantaged and/or first-generation college students are enrolled as first-time freshmen at The Florida State University during the second six-weeks of the Summer semester. In addition to taking freshman-level classes, students are involved in intensive orientation and transition activities designed to help them adjust to college life and build a foundation for academic success. Students who qualify will have their summer expenses (including tuition, room, board and books) paid through financial aid and University support. Students who enroll at the University through this program will continue to be monitored and supported through a number of structured academic and advocacy services until they complete their undergraduate degree.

Parking and Bus Services

The **Office of Parking and Transportation Services** is responsible for the administration of the parking and transportation program on campus. The University requires students, staff, and faculty who want to park on campus to display a valid Florida State University parking permit. Temporary permits are available when needed. Enforcement hours are from 7:30 a.m. to 6:00 p.m., Monday through Thursday, and 7:30 a.m. through 4:30 p.m. on Fridays.

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. Students may park in the Campbell Stadium lot where buses pick up at ten-minute intervals and deliver students to the campus. The buses operate from 7:30 a.m. to 6:00 p.m., Monday through Friday. Students with valid IDs may ride the Free Fare buses on TalTran's (city of Tallahassee public transportation) designated bus stops between the hours of 7:00 a.m. and 10:30 p.m.

Bicycle Parking

In accordance with the 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: 1) any area within six feet in front and to the side of any entrance to or exit from any building; 2) within any sidewalk; 3) on any access or egress ramp, steps, stairs or handrails; 4) in corridors; and 5) within any roadway or motor vehicle parking spaces.

The 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 (30) days of impoundment by contacting the Florida State University Police. The burden of proving ownership shall rest upon the person claiming the bicycle. Bicycles not claimed within thirty (30) 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 the 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 and Parking, UCC 1300, Tallahassee, FL 32306-2650.*

Postal Services

All United States postal services, except COD, are available at the **University Post Office**. Dormitory students are assigned post office box numbers with their room assignments. If they subsequently move off campus, however, arrangements should be made with the University Post Office for continued use of the post office boxes. Students may rent a post office box at $16.00 each term, $32.00 a year. All students holding University Post Office boxes should notify the University Post Office of any change of address.

The **Union Copy Center** provides the following services: facsimile service, color copier service, card operated copiers, and quick copy service. The center is open from 8:00 a.m. to 5:00 p.m.

Public Safety

The Florida State University's **Police Department** is responsible for all safety and law enforcement functions on campus. The four divisions of

the department are administration, police operations, investigations, and support services. The office of police operations provides motor, bicycle, and foot patrol of the campus 24 hours daily. Campus police, all sworn law enforcement officers, 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 at orientation sessions and in the residence halls. The *Safety Guide* describes all safety programs and security services available at the University and contains safety tips and emergency telephone numbers. Copies are available through the FSU Police Department at *http://www.vpfa.fsu.edu/safetyguide.html.*

The **Student Alert Force and Escort Service (SAFE)**, a bureau of Student Government, is available free to students, faculty, and staff. Escorts are available between 6:00 p.m. (or dark) and 1:00 a.m. seven days a week and are located at specific locations on campus, including five residence halls. Arrangements for an escort should be made by calling *644-SAFE*.

The **Blue Light Trail**, composed of 266 strategically placed light poles with emergency call boxes, provides well-lighted 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.

Designated Driver Program, a bureau of Student Government, provides free of charge to drive students home who feel they have been drinking too much. The program runs Wednesday to Saturday between 11:00 p.m. and 3:00 a.m. on routes off campus. Arrangements can be made to be picked up by calling *566-SAFE*.

Radio and Television

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

Students at The Florida State University 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 The 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, the Voice of Florida State is a student-run radio station sponsored by the Student Government Association. It serves two purposes: to supply the student body with music and information not available on other local radio stations; and to train The Florida State University students in the basic concepts of broadcasting and radio station management. WVFS also airs specialty shows, news and sports pertinent to University students, and all Lady Seminole basketball games.

Anyone enrolled at The 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 a Department of Communication course. Students with writing, sales, public relations, accounting, and audio production skills are welcome. Six students also serve on the nine-member board of directors.

The **Video Center** is a student-run movie channel that is broadcast to every residence hall on campus. Students gain experience in production, direction, editing, and broadcasting. Recently released feature films and original broadcasts appear 24 hours a day. The center also checks out camera equipment and schedules students to come in and use the editing equipment free of charge.

Recreation and Sports

The **Campus Recreation Office** encourages students, faculty, and staff to be involved in recreational sports through its intramural, extramural, aquatic, 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; jogging track; whirlpools; and health bar. Weight-training and fitness areas are furnished with state-of-the-art equipment. Nearby, students have access to intramural fields, outdoor track and tennis courts, and an Olympic-sized pool located in the center of campus near Oglesby Union. In addition, the University's 18-hole golf course is nearby.

The **Seminole Reservation**, a 73 acre lakefront recreational facility, is located within five miles of the main campus. Here students may swim, fish, picnic, and camp. Students may rent sailboats or canoes and take lessons offered throughout the year. A challenge ropes course is provided for team building and leadership training. The Reservation has conference room space available for meetings and retreats.

The **Intramural (IM) Office** is a resource for over 35 intramural programs. 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. The office 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 the *Florida State University Student Handbook* for a list of clubs.

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.

Dean of Students Department

The primary focus of the **Office of the Dean of Students** is to support the academic mission of The 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. Staff members provide educational opportunities for students to develop their values, decision-making skills, and leadership capabilities. For more information, call *(850) 644-2428*.

The **Student Disability Resource Center** is the primary advocate for students with disabilities. The SDRC staff monitor the environmental, social, and academic conditions affecting students with disabilities. They provide academic support services indicated by the student's disability, such as readers, note-takers, and sign language interpreters. Students may also receive assistance in registration and housing, and are offered information regarding community resources. The program provides on-campus transportation for persons with mobility impairments. The office maintains **The Theodore and Vivian Johnson Adaptive Technology Lab**, a facility housing computers and other devices that help students with disabilities successfully meet the requirements of their academic programs. For more information, contact the Student Disability Resource Center, *08 Kellum Hall* or call *(850) 644-9566*.

The **Orientation Office** offers over fifteen different sessions each year to accommodate the needs of incoming students. Every undergraduate student new to The Florida State University is required to attend an orientation session prior to enrollment. During orientation, students are

given essential information regarding University policies and procedures, academic opportunities and requirements, and community values and standards. They also meet with an academic advisor and register for courses. Additionally, orientation participants have a chance to ask questions or discuss their concerns in small groups, which are led by trained student orientation leaders. For more information about the orientation program at The Florida State University, call *(850) 644-2785*.

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 *Graduate Bulletin*. For more information regarding student judicial procedures, call *(850) 644-5136*.

The **Withdrawal Services** staff provides advocacy for students and their parents when faced with the possible interruption of their University enrollment. The office analyzes student situations to explore possible alternatives, and advises students of the policies and procedures to assist them in making informed decisions. Once the decision to withdraw has been made, the staff assess fee and grade liabilities according to regulations, and centrally facilitate the processing of all paperwork through the appropriate University officials. The staff also maintains all the necessary and/or confidential records of completed withdrawals. For more information, call *(850) 644-1741*.

Staff of the **Victim Advocate Program** provide advocacy to victims of violent crime. An advocate is on call twenty-four hours a day to respond to those Florida State University students who are victimized, and to any person victimized on the Florida State University campus. The services offered include emotional support, instructor notification, referral to counseling services, and educational programming for the campus community. For information call *(850) 644-7161*. After hours, call *644-1234*.

The **Office of Greek Life** oversees the governing bodies of fraternities and sororities: the Interfraternity Council, the National Pan-Hellenic Council (NPHC), the Panhellenic Council, and the Multi-Cultural Council. Fraternities and sororities at The Florida State University provide students with an opportunity to establish a sense of community and build a strong support group, while furthering the ideals of scholarship, leadership, service, and social development.

Student Government

The Student Government Association is the students voice at The Florida State University. Its budget allocates approximately $6.5 million of activity and service fees. These funds support the activities of the Student Senate and 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 learn about their fellow students and the University. *(850) 644-1811*.

The **Center for Participant Education** (CPE) is a free university that sponsors approximately 150 courses, as well as many films and speakers each semester. Volunteer instructors teach classes in social issues, creative expression, interpersonal relations, movement and exercise, sports, religion, and languages. The center's three Student Government-funded workshops—pottery, wood, and photography—are well equipped and open to students for a small materials fee. *(850) 644-6577*.

The purpose of the FSU **Service Corps** is to act as a liason between the students and service organizations within the campus and community. The center's goal is to provide students with opportunities that will help to develop new skills, new interests and new friends-thereby enhancing the quality of their college experience. The bureau is committed to providing the Florida State University students with quality volunteer experiences. For more information, contact *(850) 644-0086*.

The **Congress of Graduate Students (COGS)** is the representative body for graduate and professional students on campus. It offers travel grants to graduate students, sponsors programs, and acts as an advocate on their behalf. *(850) 644-7166*.

Off-campus Housing, a bureau of Student Government, is a roommate referral service available to students, an information source for off-campus apartments and living arrangements, and can assist with landlord/tenant disputes. *(850) 644-0089*.

Student Publications annually produces the *Freshman Record*, which is a publication for incoming students, and *The Torch*, which informs students about the services offered by the Student Government Association. The office also designs websites, and it offers students opportunities to gain and improve their skills in graphic design (web and print), journalism and photography. *(850) 644-0037*.

Student Legal Services is an executive bureau of the Student Government Association that enables students to attend three half-hour consultations per year with a participating attorney at no charge. Student Legal Services strives to ensure that all students have access to high-quality legal advice and works diligently to provide students with the means they need to settle legal disagreements and other matters of concern without great personal cost. Student Legal Services can provide assistance with landlord/tenant disputes, criminal defense (DUI, assault and battery, traffic offenses, auto accidents and fake ID's), consumer complaints (contracted services, auto repair, and student-targeted scams), marital/family law, probation, credit/debt, personal injury and other general legal concerns. *(850) 644-0083*.

The **Women's Center** is a Student Government agency devoted to improving the quality of life for women students and to increasing awareness of the needs and concerns of all women. The center sponsors classes, discussion groups, speakers, films, and services that address social, educational, political, and economic concerns of women. The center also offers pregnancy counseling and serves as a referral agency to community resources. The **Women's Center Resource Library** has books, periodicals, newsletters, and reference files on feminism, birth control, women's health, and other related issues. *(850) 644-6453*.

Oglesby Union, Student Life Building, and 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; ticket office; automatic teller machines; information desk; student organization offices; meeting rooms; auditorium; and ballrooms. Located in the Oglesby Union complex are a travel center, hairstyling salon, post office, copy shop, and computer lab.

Another component of Oglesby Union is **Student Campus Entertainment**, a student-run organization whose members plan and produce a variety of entertainment experiences. Students participate in all facets of entertainment programming: concert booking, movie scheduling, contract negotiation, security, catering, publicity, and advertising.

The **Office of Organizations and Leadership Services** provides student support services including a registry for clubs and organizations. Staff provide comprehensive leadership programs through "OLS Activities Council" and "Genesis."

The **Student Life Buiding** houses the Congress of Graduate Students (COGS), the National Pan-Hellenic Council (NPHC), University Housing and Counseling Center. It also has a 400-seat theatre, a cyber cafe with computer games and the Java Beans Cafe.

Florida State's **Flying High Circus**, a component of the union, is one of only a few collegiate circuses in the nation. Founded in 1947, the circus has delighted audiences at home and abroad with skillful aerial and floor routines. Students work as their own riggers, put up the big top, spread sawdust, and string lights. Performers can receive one academic credit, but no academic scholarships or tuition waivers are available.

Office of Veterans' Affairs

The **Office of Veterans' Affairs** serves veterans and their dependents by providing information about work-study employment and referrals to counseling, medical, and other community resources. The Office of Veterans' Affairs is located within the Office of the University Registrar.

COLLEGE OF ARTS AND SCIENCES

Dean: Donald J. Foss; *Associate Deans:* Joseph McElrath, Timothy Moerland, George Weaver

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: English and mathematics, history, the humanities, and the physical, biological, and behavioral sciences. 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 1911, and the first doctorate at The Florida State University was awarded in chemistry in 1952.

Over the decades, various professional schools have been established at the University, and several colleges and schools have separated from the College of Arts and Sciences to become individual administrative entities. Today, 22 percent of graduate instruction and over 40 percent of University instruction, generally, are offered by the College of Arts and Sciences. Furthermore, the college conducts a significant majority of sponsored research at The Florida State University. Currently, the College of Arts and Sciences annually awards the largest number of doctoral degrees at the University.

The College of Arts and Sciences comprises 19 departments, 14 institutes and centers, and seven 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 preprofessional and professional programs.

The College of Arts and Sciences faculty has earned national and international recognition for research, teaching, and distinguished service to the profession. The faculty of the college has included seven members of the National Academy of Sciences, three Nobel Laureates, a Pulitzer Prize winner, directors of national commissions, university presidents, and numerous winners of other national or international honors. Locally, University committees have named several arts and sciences faculty Daisy Parker Flory and McKenzie professors, and thirty-two of the college's faculty members have been selected University Distinguished Professors. More than 100 arts and sciences faculty members have won University teaching and advising awards, developing scholar awards, and Martin Luther King, Jr., distinguished scholar awards.

Graduate students in the College of Arts and Sciences have been recipients of a wide variety of honors, including a Rhodes Scholarship, McKnight and Patricia Roberts Harris fellowships, professional society scholarships, and other nationally recognized awards. Among the graduates of the college are respected scientists, writers, doctors, chief executive officers of major corporations, lawyers, school and college teachers and administrators, and other highly regarded professionals.

Facilities

The College of Arts and Sciences is housed in 21 buildings on the main campus and at a number of off-campus field stations. Arts and sciences research activities are conducted at various locations literally around the world—from an archaeological site in Cetamura, Italy, to the Antarctic. Special facilities of the college include the Van de Graaff nuclear accelerator, the Proton-Induced X-Ray Emission Laboratory, the Statistical Consulting Center, and the Marine Laboratory on Apalachicola Bay. The National Park Service's Southeast Archaeological Center is a major repository of artifacts that is heavily used by anthropology majors. The college also staffs a large number of other specialized research and teaching laboratories: computer laboratories, radioisotope laboratories, a nuclear magnetic resonance lab, fluid dynamics and ocean modeling labs, language and writing labs, and other facilities. Faculty and students from several departments and programs in arts and sciences conduct research on the supercomputer and other large-scale computers at the School of Computational Science and Information Technology. The National High Magnetic Field Laboratory at Innovation Park also provides superb research experiences for faculty and students. Many departments maintain their own libraries of journals, books, and reference materials.

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. For example, the Institute of Molecular Biophysics, the Geophysical Fluid Dynamics Institute, and the Program in Neuroscience are important interdisciplinary research centers. Similarly, the Programs in Humanities and American and Florida Studies pool diverse faculty talent and appeal to a wide spectrum of students. 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, approximately 800 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. Each year, 30 to 40 arts and sciences students receive University fellowships, college teaching fellowships, McKnight Black doctoral fellowships, Patricia Roberts Harris minority fellowships, psychobiology fellowships, and other awards. 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 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. Minimally, a combined score of 1000 on the verbal and quantitative section of the Graduate Record Examinations (GRE) or a 3.0 grade point average (GPA) at the baccalaureate or graduate school previously attended is required for admission as a regular graduate student; individual departments and programs may set higher standards. Prospective graduate students who are foreign nationals must also earn a score of 550 or better (213 or better on the computer version) on the Test of English as a Foreign Language (TOEFL). 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.*

Full-Time Course Load

Full-time graduate students must take twelve (12) semester hours each fall and spring semester. A full-time load for a graduate teaching or research assistant in the sciences is nine (9) semester hours

in the Fall and Spring terms. Research and teaching assistants in the humanities area should consult their college or program for the minimum full-time course load. Fellowship holders must carry twelve (12) semester hours.

Limitations on Supervised Teaching and Research Course Work

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 (3) semester hours of supervised research credit and three (3) semester hours of supervised teaching credit may be counted toward the master's degree. The normal limit for candidates for doctoral degrees is five (5) 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 (30) semester hours, six (6) of which must be thesis credits. A course-type master's program requires a minimum of thirty-two (32) 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 (6) semester hours of thesis has already been met. Students who have left the campus must register for at least two (2) semester hours of thesis credit per term so 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. After the completed admission to candidacy form has been filed with the University Registrar, the student may add dissertation hours retroactively for the term in which the exam was passed. A minimum of twenty-four (24) 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 (24) dissertation hours has been met. Students who are off campus must register for at least two (2) semester hours of dissertation each term in which they receive faculty supervision.

The PhD residency requirement is satisfied as follows: after completing thirty (30) graduate semester hours or being awarded the master's degree, the doctoral student must be continuously enrolled for twenty-four (24) graduate semester hours during any 12-month period.

The PhD supervisory committee must consist of a minimum of three members of the graduate faculty holding doctoral directive status, one of whom shall be designated the representative-at-large and shall be drawn from outside the student's department or program. Annually, this committee will assess in writing the progress of the student, making copies of its report available to the Dean of Graduate Studies, the department chair, and the Associate Dean for Student Affairs in Arts and Sciences. Within a week of the dissertation defense, the representative-at-large must file with the Dean of Graduate Studies and the Associate Dean for Student 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 one (1) semester hour of thesis or dissertation credit in the final term in which a degree is granted. Nonthesis-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 two weeks of the semester in which the candidate intends to graduate, the student must formally apply for a diploma at the Office of the University Registrar and, for those writing theses and dissertations, obtain the final term degree clearance form. Three final copies of the thesis or dissertation must be submitted to the Office of Graduate Studies by the official University deadline in order for the student to graduate that term.

COLLEGE OF BUSINESS

Dean: Melvin T. Stith; *Associate Deans:* Joe D. Icerman, E. Joe Nosari, Pamela L. Perrewé

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 PhD 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 (MS) in management, 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 master of business administration program is offered on a part-time and full-time basis. A part-time MBA program is also offered at the Panama City Campus. The master of accounting program is designed to allow the student to concentrate in either assurance services, accounting information systems, corporate accounting, or tax accounting. This program provides students with greater breadth and depth in accounting education than can be accomplished in the baccalaureate program. The master of science in management carries majors in management information systems, hospitality and tourism, and risk and insurance. A part-time program is also an option in the MAcc and MSM programs.

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 and concentrate in either accounting, finance, management information systems, organizational behavior and theory, strategic management, marketing, or risk management and insurance.

Institutes and Centers

The **Jim Morgan 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 **Human Resource Management Center** (HRC) 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 **DeSantis Center** provides high quality management education to executives and managers throughout the United States and in selected foreign countries. It also supports research on effective management education approaches and technologies that enhances the creation and transfer of knowledge between the academic and the practicing professional.

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 Strozier Library and the Oglesby Union and contains support facilities for student placement, 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 totally 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).

Admission to all graduate programs in business is based upon the following factors: 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 GPA in undergraduate upper-division accounting courses is also considered.

MBA Program: forty-three (43) semester hour full-time and forty-two (42) semester hour part-time programs. For full-time students, the three semester program begins the Summer term (which starts in May), and the application deadline is February 1st. For part-time students, the program begins the Spring term (which starts in January), and the application deadline is October 1st. All materials, including a GMAT score, must be received in our office by the application deadline. The part-time programs are available at both the main campus and the Panama City branch campus.

Master of Science in Management Program: The major in hospitality and tourism program requires completion of thirty-six (36) semester hours. Applicants to the program are accepted every semester, and the program may be completed on a full-time or part-time basis. All application materials should be received by June 1st for Fall; October 1st for Spring; or March 1st for Summer admission.

The management information systems major requires completion of thirty-two (32) semester hours and begins only in the fall term. It is primarily a full-time program; however, students may attend on a part-time basis under certain circumstances. Deadline for receipt of **all** application materials is June1st.

The risk and insurance major is a corporate program designed for the insurance professional and requires completion of thirty-three (33) semester hours of graduate level coursework. It is offered on a distance-learning basis to allow the working professional to obtain the degree.

Master's of Accounting Program: This is a thirty-three (33) semester hour program that allows admission any term. Deadlines for receipt of all application materials are outlined below: 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.

Doctor of Philosophy 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 is May 1st.

Individuals interested in the graduate programs offered by the College of Business should contact: *The Graduate Office, College of Business, The Florida State University, Tallahassee, FL, 32306-1110* (*gradprog@cob.fsu.edu*). Enrollment in graduate business courses is severely limited by both space and accreditation standards. Non-degree students seeking registration in graduate business courses must obtain the permission of the academic dean.

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.

Master of Business Administration 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 emphasizes breadth of exposure to the various functions of business and management, recognizing that the career of a successful manager will span multiple functions. This breadth of 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.

Admission into the MBA program, whether on a full-time or part-time basis, requires prior completion of the following specific set of prerequisites: calculus, elementary statistics, financial accounting, micro- and macro-economics, and basic finance. In addition, applicants must have at least two years full-time work experience in a professional or supervisory position.

The part-time MBA program is structured for students who hold full-time positions during the day, and will require seven (7) semesters to complete. The full-time program is completed within 12 calendar months. Course work usually is scheduled during the day.

The forty-three (43) semester hour program includes eleven standard courses taught by a variety of departments within the College of Business. All MBA students are required to complete the following courses: ACG 5308, Accounting Concepts for Managerial Control; BUL 5810, The Legal Environment of Business; ECP 5706, Economic Analysis for Management; FIN 5445, Problems in Financial Management; ISM 5021, Information and Technology Management; MAN 5245, Organization Behavior; MAN 5501, Operations Management; MAN 5601, Multinational Business Operations; MAN 5716, Business Conditions Analysis; MAN 5721, Strategy and Business Policy; and MAR 5816, Marketing Strategy. Full time MBA students are also required to complete a one (1) semester hour course in corporate survival skills. The remaining three (3) courses are considered electives. The College of Business offers four options for MBA electives; three (3) courses in global entrepreneurship, three (3) courses in finance, three (3) courses in marketing and supply chain management, or any 3 electives chosen from these areas. Global entrepreneurship electives consist of entrepreneurial finance, entrepreneurial management, and entrepreneurial field studies. The finance electives consist of investment management and anaylsis, multinational financial management, and financial modeling. Purchasing and supply chain management, business to business sales and marketing, and electronic business in supply chain marketing make up the marketing and supply chain management electives. Electives also may be chosen from other areas in business with approval of the academic dean for graduate programs.

Master of Accounting 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 (33) 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.

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

Juris Doctor/Master of Business Administration Curriculum

The College of Law and the College of Business offer a joint-degree program leading to the juris doctor and the master of business administration 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, The Florida State University, Tallahassee, FL 32306-1110 (gradprog@cob.fsu.edu).*

Doctor of Philosophy 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, and 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 resource management, strategic management, marketing, or risk management and insurance. A support area may be selected from a non-business 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 course work. 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 (24) 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

Dean: John K. Mayo; *Associate Deans:* Gary R. Heald (Academic Affairs), Jennifer N. Buchanan (Student Affairs)

American society is enmeshed in an all-encompassing and ever-expanding web of human and technological channels of communication. People encounter the changing terminology and technology of communication on a daily basis. The definition of this complex and ever-changing world of communication, the explanation of its assorted functions, and the understanding of its multitude of effects underlie the teaching, research, and service missions of the College of Communication at The Florida State University.

The roles of the College of Communication are: 1) to study the human communication process in all its ramifications through basic and applied research; 2) to transmit the knowledge thus acquired through undergraduate and graduate teaching; and 3) to serve the University, the state, the nation, and the world by applying its expertise to the solutions of human and institutional communication problems.

The college offers a unique and integrated series of communication degree programs at the undergraduate level. The curriculum covers the whole of human communication (both normal and disordered), speech and interpersonal communication, group and organizational communication, as well as mass-mediated and interactive, computer-based communication.

The College of Communication offers both academically and professionally-oriented courses of study. Each curricular sequence integrates knowledge about human communication from a variety of perspectives: physical; biological; social science; humanities and the arts; as well as business, government, and other related professional orientations.

The interests, perspectives, and activities of the College of Communication are extensive. Faculty members from the college serve as officers in professional and academic societies and associations. A series of journal publications, books, convention papers, and monographs have established a number of faculty as leaders in their respective fields.

Graduate Degree Programs

Students making application for admission to one of the departmental graduate programs must also apply through the Office of Admissions.

Communication Disorders

Programs of study leading to the master of science, master of arts, advanced master's, and doctor of philosophy degrees are available in the Department of Communication Disorders (see the departmental entry of this *Graduate Bulletin* for complete descriptions).

Communication

The graduate programs in communication offer several specialized majors leading to the master of arts, master of science, and doctor of philosophy degrees (see the departmental entry of this *Graduate Bulletin* for complete descriptions).

Research and Service Facilities

The College of Communication offers the graduate student the opportunity for enriched learning experiences through participation in a variety of teaching, research, and/or service laboratories.

The **Florida Government Performance Survey Research Center** helps Florida government agencies determine how well they are meeting the needs of their customers. It also offers strategies to improve communication and organizational performance of state and local governments. It conducts public opinion polls, work climate and other employee surveys, and web-based surveys, as well as media audience studies, readership surveys, message testing, focus groups, performance evaluation and communication audits.

The communication science laboratories provide facilities for the study of physical and psychological aspects of sound, speech, voice, and language. **The Speech Science Laboratory** has specialized equipment enabling analyses of duration, intensity, spectral, and fundamental frequency aspects of speech. Instrumentation and procedures for the forensic study of speech enable the detection of signals of noise and speaker identification from recorded speech samples. The **Voice Science Laboratory** includes computer-interfaced instrumentation for measuring vocal intensity and pitch, aeromechanical aspects of voice and resonance, and physiological functioning of respiration and the vocal apparatus. The **Hearing Science Laboratory** utilizes computerized instrumentation for basic research on loudness, pitch, binaural hearing, and the temporal aspects of hearing, as well as for the study of hearing sensitivity using a variety of auditory stimuli. The facility includes two sound-attenuated suites and an electronics shop. The **Emerging Language Laboratory** includes equipment for recording, editing, and analyzing audio and video samples of speech and language discourse and social interactions. On-site recording facilities accommodate small groups of children and children with their parents. Portable equipment is available for field recordings. Software programs for analyzing language samples and summarizing results are 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 **Speech and Swallowing Laboratory** includes instrumentation to study the physiology/kinesiology of the speech/swallowing mechanism. Measurement techniques include surface electromyography, acoustic measures, and measures of strength and endurance. Work in this laboratory is designed to develop or refine techniques for the evaluation and treatment of individuals with speech and swallowing impairments.

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 output, switches, keyboards, software programs, and other computer-based systems.

The **Florida State University Center for Autism and Related Disabilities** was established in 1993 and is one of six similar centers in the state. Over 900 individuals with autism or related disabilities have been identified in the 18 Florida panhandle counties served by The Florida State Center. The center provides services to eligible individuals for communication, social, and behavior problems, and provides information, consultation, and technical assitance to families and professionals. The center also trains professionals and preprofessionals who serve, or are preparing to serve, the client population.

Teaching Facilities

The Production Center is a state-of-the-art media production complex that supports the video and audio production activities of the Department of Communication. The Production Center houses a variety of equipment and facilities: a fully equipped television studio; video-editing suites in several formats, including DV, 3/4" SP, and Betacam SP; field production cameras and recorders in each of those formats; computerized on and offline editing, digital video effects, and computer animation capabilities; non-linear editing; and on-site engineering and management support. The facility was designed around the principle that students need maximum exposure to the equipment to develop the competency required in media production fields.

The communication program has two lab facilities that are used for instruction and for the production of multimedia products. The mission of the program is to provide training and real-world experience to students in the Department of Communication. In fulfillment of this mission, the graduate program actively seeks partnerships with corporations, government agencies and other organizations interested in developing products and

services that use technology in innovative ways to meet specific information, communication and educational needs. The graduate curriculum provides instruction in the integration of new communication technologies, e-commerce, social, organizational and educational arenas. Building on a solid base of research in communication and interactivity, students learn how to analyze problems and present practical solutions. To this end, the program pursues projects linking people through technology and assisting students with design projects in various areas, including website, CD-ROM and groupware development. Expertise in these areas will be among the most important skills of new communication professionals.

WVFS-FM (V-89) is The Florida State University's student-operated college radio station. Communication students may work at V-89 for college credit and are responsible for programming, announcing, news and sports coverage, and all other station operations. V-89 is "The Voice of Florida State," providing campus information and alternative music programming. V-89 is now available on the World Wide Web through streaming video at *http://www.vfs.fsu.edu*. V-89 has been the recipient of several national programming awards.

Seminole Productions is the Department of Communication's video production unit. Seminole Productions provides a variety of services to other campus departments. One major client is the athletic department. Seminole Productions also produces the weekly University sports highlight show, *Seminole Uprising*, which reaches over two million households in Florida via the Sunshine Network. Students have numerous opportunities to become involved with Seminole Productions.

The **L. L. Schendel Speech and Hearing Clinic** is the primary teaching laboratory for students enrolled in the communication disorders master's degree programs. This 40-room facility is the central focus of learning and service activity. Videotape laboratories, diagnostic audiology instrumentation, sound isolation rooms, electronic communication devices, and a complement of other clinical resources serve the program's needs for clinical management and instruction.

The College of Communication maintains seven fully-equipped computer laboratories. While some labs serve specific program areas, others are available for general instruction and research. The labs are equipped with a full complement of personal computers and laser printers, all of which are connected to the college's network. Connectivity to the network allows faculty and students to share data and collaborate on projects.

The labs' personal computers include a full array of commercial software for word processing, spreadsheet development, database management and academic applications for statistical and content analysis. Some of the labs serving the Department of Communication include hardware and software for fully integrated desktop publishing and video applications. The Department of Communication Disorders offers labs equipped with hardware and software for language sample analysis, instructional material development and desktop publishing. Certain labs also include hardware and software for nonlinear video editing.

Assistantships/ Scholarships

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

In addition to University fellowships, the college administers various awards. The **Edney Fund** and the **Joanne and James Lynagh Fellowship** offer tuition and travel support for graduate students in the Department of Communication. The **Schendel, Anderson, and Backus Scholarships** are available for majors in communication disorders. The college also awards a teaching fellowship annually.

SCHOOL OF CRIMINOLOGY AND CRIMINAL JUSTICE

Dean: Daniel Maier-Katkin; *Associate Dean*: Thomas Blomberg

The Florida State University has one of the oldest criminology programs in the world. Starting as a nondegree concentration in the School of Social Welfare in 1953, it became the Department of Criminology and Corrections in the School of Social Welfare in 1956. The master's program and a joint doctoral program with sociology were established in 1956. An independent doctoral program in criminology was authorized by the Board of Regents in 1971. This doctoral program was the first PhD program in criminology established in the United States. In 1973 the department became the School of Criminology. In 1991 the school became the School of Criminology and Criminal Justice.

Faculty members of the School of Criminology and Criminal Justice have international reputations and have held offices in professional associations, served on numerous criminal justice task forces and committees, and received various scholarly awards. They have been council members, fellows, and presidents of the American Society of Criminology; editors and associate editors of scholarly journals; and Fulbright scholars. In addition, former students have achieved national and international recognition and can be found in important positions in almost every state and many foreign countries.

At The Florida State University, criminology is viewed as a broad discipline, encompassing the scientific study of crime, criminals, the lawmaking process, the criminal justice system, and the treatment of offenders. The program is interdisciplinary and integrative in nature, drawing upon many different disciplines and paradigms for theoretical and methodological approaches. Among these disciplines are sociology, psychology, political science, economics, anthropology, geography, public administration, urban studies, demography, history, philosophy, biology, and law.

The master's program is concerned with both theory and practice in the belief that neither stands alone. Sound practice demands sound theory, and sound theories are developed and modified through careful study as they are put into practice. The master's program prepares individuals for an administrative or research career in the criminal justice system or some related area, as well as teaching, at the community college level.

The doctoral program is also concerned with the integration of theory and practice, with a heavy emphasis being placed on theory and research. Recognizing that the discipline is dynamic and constantly changing, the faculty permits students broad latitude in developing areas of criminological specialization for their individual programs. The doctoral program prepares individuals for an academic career of teaching and research, as well as a higher level research or administrative career in the criminal justice system.

The School 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, a dual master's degree program is offered with the School of Public Administration and Policy. An evening master's program is also provided.

Facilities

The School of Criminology and Criminal Justice is located in the Hecht House. Criminology students also have access to the Law Library and the state library and archives. The school also maintains its own computer lab, with numerous personal computers and printers that are IBM compatible. Students at the University also have access to one of the few supercomputers in the world.

The University's location in Tallahassee affords direct access to extensive research opportunities. Tallahassee houses all levels of state and federal courts except the United States Supreme Court, as well as several state correctional facilities, drug treatment facilities, and a federal prison. The legislature, cabinet, governor, attorney general, and departments of Corrections and Probation and Parole are situated in Tallahassee.

Graduate study at the School of Criminology and Criminal Justice provides access to research facilities that match or exceed any in the nation. Important and ongoing research is conducted by both House and Senate Criminal Justice and Corrections Committees. The Florida Department of Law Enforcement compiles UCR and related crime statistics, and the Criminal Justice Estimating Conference makes prison projections. The Office of the State Courts Administrator maintains an extensive data file on prosecution and court activity from filing through disposition, and the Department of Corrections maintains a widely acclaimed database that incorporates information from sentencing through release from probation.

Opportunities

The School of Criminology and Criminal Justice promotes interdisciplinary study by offering various degree options. The school and the School of Public Administration and Policy offer a dual degree program leading to both a master of public administration and a master of science in criminology. This dual degree program, established to prepare students for overlapping careers in criminal justice management, takes approximately two years to complete, and requires a minimum of sixty-six (66) semester hours.

The school offers doctoral candidates the opportunity to assist professors in undergraduate teaching. Students may become involved in teaching either by being awarded a teaching assistantship or by taking CCJ 5944, a supervised teaching course. Teaching assistants may be assigned to assist with a variety of courses and are responsible for designing their own course outlines, lectures, and examinations. Teaching assistants are assigned faculty mentors who may be consulted concerning teaching assignments.

The school also offers its students exposure to scholarly and practical research. Each year the school and the Department of Corrections sponsor the Southern Conference on Corrections. This conference attracts a number of state and local professionals as well as academics from around the country. Students are encouraged to attend and participate in this conference. Special student panels, where students may present their own papers on correctional issues, are regularly included in the southern conference schedule.

Because of our location in Florida's capital city, students in the School of Criminology and Criminal Justice are afforded many employment opportunities with various state, local, and federal agencies such as the Florida Department of Law Enforcement (FDLE), Tallahassee Police Department, Florida Department of Corrections, Florida Department of Probation and Parole, Health and Rehabilitative Services, state and federal courts, the Florida Legislature and its committees, the Office of the Governor and staff, local law enforcement agencies and state law enforcement training academies, a federal prison, and a number of related private firms. Numerous graduates of the school hold prominent positions within these agencies and firms. Students may take advantage of these research and employment opportunities through the schools internship program. Specific details concerning placement possibilities are available from the school's internship director.

Scholarships, Awards, and Financial Aid

Each year the School of Criminology and Criminal Justice offers a number of assistantships to incoming and continuing graduate students with excellent academic records. Assistantships require 13 to 20 hours of work per week. Work commitments vary by salary and job assignments. Tuition waivers are included as part of these awards. Only full-time students are eligible for these awards.

In addition to these awards, the school offers the **Robert L. Clark Scholarship**. This scholarship was established in 1980 by James and Carol Smith in honor of Robert Clark, chief administrator of the Broward County sheriff's office for over 20 years. This scholarship is primarily designed for incoming graduate students. The award is made on an annual basis but may be continued for a second year and carries no work assignment. Stu-

dents interested in this award should apply through the Office of the Dean, School of Criminology and Criminal Justice.

The school 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. The school also administers several small-loan programs to help students pay tuition costs. These loans are generally administered in amounts not exceeding $1,000 and may not be available during all semesters.

Admission Requirements

All regular requirements of the University must be met. The School 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. For Fall admission, a completed application packet must be received by January 1st. Application materials for Spring admission must be received by October 1st. No applications are accepted for Summer admission.

Master's Program

Applicants must submit evidence of a completed baccalaureate degree, a verbal and quantitative Graduate Record Examinations (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 score of 1000 on the combined verbal and quantitative portions of the GRE **and** an undergraduate upper-division grade point average (GPA) of 3.25 (on a 4.0 scale) is required for admission.

Doctoral Program

Applicants for the PhD program must submit the same materials listed for the master's program, as well as evidence of a completed master's degree and a copy of their master's thesis or equivalent research paper. PhD applicants must meet the minimum admissions requirements listed for master's applicants **and** achieve a 3.5 GPA in their master's degree study.

Degree Requirements

All Graduate Students

All regular requirements of the University must be met.

All graduate students must achieve a grade of "B" (3.0) or better in each of the following required courses: CCJ 5285, 5605, 5606, 5705, and 5706. Approved equivalent courses from other programs may be substituted for the above.

In addition to those courses required for the master's degree, all doctoral students must complete CCJ 5609, 5707 and 5740.

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

Master of Science

Students pursuing the MS 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 (33) semester hours of course work—this option does not qualify a student for application to the PhD program;

2. Successful completion of twenty-four (24) semester hours of course work **and** a minimum of six (6) hours of credit for an original thesis—this option includes an oral thesis defense; or

3. Successful completion of thirty (30) semester hours of course work **and** three (3) hours of credit 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 (24) hours of credit earned within the School of Criminology and Criminal Justice. This includes course work, thesis, or area paper.

The School 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/dlstudents/index.htm.*

Master of Arts

Students studying for the MA degree may follow any of the three MS options. For the MA there is the additional requirement that course work must include at least six (6) hours of humanities credit, and the student must demonstrate proficiency in a foreign language as determined by University criteria.

Doctor of Philosophy

Students pursuing the PhD must satisfy the requirements listed above for all graduate students. The sufficiency of additional course work is determined by the student's supervisory committee. Qualification for PhD candidacy is established upon the passing of written comprehensive examinations in three areas: theory, research methodology, and a substantive area approved by the student's committee. Theory and methods exams are graded by school-wide committees; the substantive exam is graded by the student's supervisory committee.

A dissertation prospectus must be approved by the student's supervisory committee after the passing of comprehensive examinations. A minimum of twenty-four (24) 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: Richard C. Kunkel; *Executive Associate Dean:* Steve Rollin; *Associate Deans*: Carolyn Herrington, Lee Jones

The primary purpose 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 following programs have curricula which enable the college to meet its purpose.

Departments and Programs of the College of Education

Department of Educational Leadership and Policy Studies

Adult education

Comprehensive vocational education

Educational administration/leadership

Foundations of education

- History and philosophy of education
- International/intercultural development education
- Social science and education

Higher education

- Institutional research

Certificate in college teaching

Certificate in education policy

Certificate in human resource development

Department of Educational Psychology and Learning Systems

Combined program in counseling psychology and school psychology

Counseling and human systems
School psychology

Educational psychology
Sports psychology

Educational research and testing
Research design and statistics

Evaluation and measurement
Research and evaluation

Instructional systems

Certificate in educational technology

Certificate in online instructional development

Certificate in program evaluation

Department of Elementary and Early Childhood Education

Early childhood education

Elementary education

Reading education and language arts

Department of Middle and Secondary Education

English education

Health education

Mathematics education

Multilingual/multicultural education

Science education

Social science education

Certificate in teaching English to speakers of other languages

Department of Special Education

Emotional disturbance/learning disabilities

Education of the mentally handicapped

Rehabilitation counseling

Special education

Visual disabilities

Certificate in early childhood/special education

Department of Sport Management, Recreation Management and Physical Education

Physical education

Recreation and leisure services administration

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; organizations that provide counseling services; career development; personnel services; adult education; leisure services; 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, course work in an area of specialization, and a comprehensive examination and/or a 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.

Facilities and Opportunities

The College of Education houses two college-wide centers and six departmental research and service centers that provide research facilities and support research undertaken by faculty members and students. College-wide centers are the Center for Policy Studies in Education and Center for the Study of Teaching and Learning. Departmental research and service centers are the Center of Educational Research Evaluation Services, Center for the Study of Technology in Counseling and Career Development, the Hardee Center for Women in Higher Education, Community Education Services, The Florida State University School, and Institute for the Studies in 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 also submit a GRE score as part of the admission process.** Individual departments may have additional requirements for admission. Students should consult 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.

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 course work. 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, *108 Stone Building*, monitors students' degree progress and checks each student's record for graduation. **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 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 master's or doctoral directive 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 also 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 (32) semester hours of graduate credit must be completed with a 3.0 GPA in course-type programs. Twenty-one (21) 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 (32) semester hours.

   b. A minimum of thirty (30) semester hours of graduate credit must be completed with a 3.0 GPA in thesis-type programs. Eighteen (18) 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 (6) hours of transfer credit will be applicable toward the degree.

   e. The maximum number of 4000 level hours that may be included in the program of study is six (6) hours.

   f. Students in thesis-type programs must be registered for a minimum of one (1) hour of thesis credit in the semester that their degree will be awarded.

4. A written comprehensive examination for course-type programs and an oral defense for thesis-type programs may be required by most departments. Clearance to schedule these examinations must be obtained from the Office of Academic Services, *108 Stone Building*. 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/supervisory committee form on file in the office of student services before clearance will be given. Students lacking these materials will not be allowed to take their examinations. The results of the examination/defense must be submitted to the Office of Academic Services upon completion.

5. The thesis prospectus (if required) must be submitted to the department chair prior to the defense.

Specialist Degree Program

The specialist in education degree is an advanced master's degree. Requirements vary 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 master's or doctoral directive 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 also include all courses required for the degree, i.e., specialist comprehensive exam, thesis hours, and thesis defense, if applicable.

   a. A minimum of thirty (30) semester hours of graduate credit must be completed with a 3.0 GPA. Twenty-one (21) semester hours of credit in the course-type program must be taken on a letter-grade basis (A, B, C). Eighteen (18) 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 (30) semester hours.

   b. Half of all the course work must be in the field 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 one (1) semester hour of thesis credit in the semester that their degree will be awarded.

4. A written comprehensive examination for course-type programs and an oral defense for thesis-type programs may be required by most departments. Clearance to schedule these examinations must be obtained from the Office of Academic Services, *108 Stone Building*. Students must have a 3.0 GPA in all degree work to be eligible to register through the University Registrar and the department. Students must also have an approved program of study/supervisory committee form on file in the Office of Academic Services before clearance will be given. Students lacking these materials will not be allowed to take their examinations. The results of the examination/defense must be submitted to the Office of Academic Services upon completion.

5. The thesis prospectus (if required) must be submitted to the department chair prior to the defense.

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. Three members must hold doctoral directive status. Two members, including the major professor, must be from the program major in which the student will receive a degree. One member represents the graduate faculty at large and holds doctoral directive status.

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. It will be designed to assess the student's ability to pursue the doctor of education or doctor of philosophy degree in the field 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 are the basic statistics and research design skills for pursuing independent inquiry. Students seeking the doctor of philosophy degree must include the University residency requirements on the program of study (twenty-four [24] semester hours in three consecutive semesters or 12 months). Students seeking the doctor of education degree have the option of completing the University residency requirement by registering for thirty (30) semester hours during a 16-month period. Twelve (12) semester hours of the residency requirements in either the doctor of philosophy or doctor of education degree must be exclusive of supervised research, supervised teaching, and dissertation hours.

5. A written and oral preliminary examination is required. Clearance to schedule these examinations must be obtained from the Office of Academic Services, *108 Stone Building*. Students must have a 3.0 GPA in all degree work to be eligible to register through the University Registrar and the department. Students must also have the following on file in the Office of Academic Services before clearance will be given:

a. An approved program of study/ supervisory committee form; and

b. Departmental diagnostic examination results.

Students lacking these materials will not be allowed to take their examinations. Successful completion of the exam admits students to doctoral candidacy. Students must be admitted to candidacy at least six months prior to graduation. The results of the examination must be submitted to the Office of Academic Services upon completion.

6. A prospectus of the dissertation must be submitted to the department chair after passing the preliminary examination. It must be approved by the associate dean at least four months prior to the defense of the dissertation.

7. Students must register for a minimum of two (2) hours of dissertation credit in each semester that work is in progress on the dissertation. Not less than twenty-four (24) 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 one (1) semester hour of dissertation credit in the semester their degree will be awarded.

Office of Academic Services

Director: Kenneth B. Tellis

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. The primary responsibilities of this office are to: 1) process applications for admission and readmission to the College of Education; 2) maintain the dean's academic records for all students who are pursuing degrees in education; 3) monitor student's degree progress; 4) screen and approve students for admission to teacher certification; 5) conduct required graduation clearance and approve students for teacher certification; and 6) provide consultative and administrative services for the students and faculty in the college.

Planning Guide to Teacher Education Programs

Florida Statute 1004.04 and State Board of Education Rule 6A-5.066

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 to have a degree conferred.

In addition to those programs offered through the College of Education, the following approved graduate teacher education programs are offered through other schools or colleges:

Art Education (School of Visual Arts and Dance)

Communication Disorders (College of Communication)

Educational Media Specialist (School of Information Studies)

Criteria for Admission and Application to a Teacher Education Program

1. Achieve a score of 1000 on the combined aptitude portions of the Graduate Record Examination (GRE), **or**, have passed all sections of the Florida CLAST (waivers or other alternative means of meeting this requirement are not acceptable);

2. Earned a baccalaureate degree from an accredited institution;

3. Complete an application for admission to a teacher education program in the Office of Academic Services, *108 Stone Building*. **Note:** this is distinct from admission to a college or school.

4. Approval of the department in accordance with departmental criteria; and

5. Approval of the Office of Academic Services.

Total program length for state-approved teacher preparation programs are subject to revision based on changes in Section 1004.04, Florida Statutes, Public Accountability and State Approval for Teacher Preparation Programs and State Board of Education Rule 6A-5.066, Approval of Preservice Teacher Preparation Programs.

Subject Area Specialization/ Professional Education/Clinical Experience Curricula

1. At least thirty (30) semester hours completed in the subject specialization area as determined by the student's program;

2. Professional education coursework to include: a) reading-literacy acquisition 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 10 weeks duration in an approved setting.

Note: students should consult with a program advisor 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 course work (some programs may require a higher GPA);

2. Complete standards and specific course work 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 preprofessional 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.

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 Clinical Partnerships (Student Teaching)

Director: Charlotte S. Minnick

The director of clinical partnerships is responsible for the assignment of students for student teaching experiences. The director 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 supervising teachers for student teachers. Faculty members work with supervising teachers and student teachers in planning and carrying out the student teaching experience. The Office of Clinical Partnerships 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 **at the rate of at least two representing the same academic program. Academic programs may, at their discretion, establish a minimum group size greater than two 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 the programs of social work, human sciences, communication disorders, visually impaired, music, and vocational home economics education will also be concentrated in those counties listed **but may** be placed in additional locations should program certification requirements dictate their use.

Placement Locations

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

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

Area III—Brevard, Orange, Seminole, and Volusia counties;

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

Area V—Broward, Dade, and Palm Beach counties.

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.

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.

Application to Student Teaching

An application for student teaching must be submitted to the Office of Clinical Partnerships according to the following schedule:

Note: application materials are available only online at *http://www.coe.fsu.edu/student_teaching/stforms.html*

Third Monday in September for Spring semester student teachers,

Second Monday in February for Fall semester student teachers, and

First Monday in April for Summer term student teachers (restricted).

Criteria for Admission to Student Teaching

The following criteria are required for placement to student teach:

1. Admission to teacher education outlined above under 'Criteria for Admission and Application to Teacher Education Program;'

2. Completion of at least one semester of 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; and

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 standards, specific clinical experiences set by the program or the University.

Office of Minority Affairs

Director: Bruce Daniels

The College of Education **Office of Minority Affairs** takes the lead in assisting the College of Education at The Florida State University in its efforts to becoming a wholesome environment for under-represented students. The support of educational goals for under-represented students is provided by activities that encompass the academic, social and professional realms of education.

In addition, the Office of Minority Affairs is actively dedicated to recruiting, and more importantly, retaining the students who diversify the ethnicity of the College of Education. In accomplishing this goal, we have considered national and state demographic trends in making the aggressive efforts necessary to address the demands of an ever-changing student population. Working directly with all minority students is the major intention; however, every effort will be made to be responsive to the needs of all students.

One of the great opportunities available through the Office of Minority Affairs includes the annual Graduate Recruitment Day for interested students who are planning to continue their post-secondary education. This event allows prospective students to meet with faculty, staff, and current students in the College of Education. Information concerning degree requirements, financial assistance, housing, campus organizations, and other activities will be provided to make students aware of the issues important of their University.

FAMU—FSU COLLEGE OF ENGINEERING

Dean: Ching-Jen Chen; *Associate Dean:* Samuel Awoniyi; *Director of College Relations*: Norman E. Thagard; *Director of Student Services:* Sheldon White

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. The college offers professional programs of study that can lead to the bachelor of science (BS) degree, the master of science (MS), and doctor of philosophy (Ph.D.) in chemical, civil, electrical, industrial, and mechanical engineering, a bachelor of science in computer engineering, and a master's of science and doctor of philosophy in biomedical engineering. The BS programs are accredited by the Accreditation Board of Engineering and Technology (ABET). 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 objectives of the college are to educate engineers of excellence at both the undergraduate and graduate levels, by the highest standards in the discipline recognized by national peers; to provide greater participation in professional engineering and technology, engineering teaching and research of African-Americans, women and other minorities; and to achieve national and international recognition of the college through the excellence of activities of its faculty and students in their research and scholarly pursuits, as well as their professional and service endeavors.

Facilities

Housed in a contemporary facility custom-designed by engineering educators, the College of Engineering is located just south of the main campuses of both universities. Increasing enrollment and expanded research has prompted the planning of a new engineering building (Phase III with 90,000 square feet) to be completed in 2005. The 18 million-dollar facility will be located next to the existing facility, adjacent to Innovation Research Park. This new building is being planned to house a Engineering Technology Center and a modern information center. In addition, the Challenger Learning Center in downtown Tallahassee contains a planetarium and wide-screen IMAX theatre that will bring state-of-the-art education to thousands of Florida middle school students in the Big Bend area and put them on the fast-track in engineering, math and science.

The Division of Communications and Multimedia Services (CMS) provides support for computing, telecommunications, local area networking and technology-based curriculum delivery within the College. CMS offers computing facilities, training and technical assistance for students, faculty and staff.

Students in the FAMU-FSU College of Engineering have access to a large number and variety of computer systems. A network of nearly 1800 computing devices is available for the academic and research efforts of the college. The college's data center houses multi-processor servers to handle intensive compute processing, email and web services.

The college's computing infrastructure consists of a gigabit core Layer 3 switch connecting to all communications closets via gigabit fiber optic cables. Recently, the college upgraded its Internet connection to a gigabit link connecting through the FSU backbone (FSU acts as the Internet Services Provider for the college) allowing for faster access to the Internet2 and NSF's vBNS network. Desktop environments consist of high-end Pentium-class workstations along with a cluster of Sun workstations. The college also contains multiple research labs containing dozens of machines clustered together to provide enhanced research capabilities as well as SGI boxes to perform complex number crunching for simulations.

The college also has three major student-use facilities as well as state-of-the-art instructional classrooms. The college has over 150 student-use high-end Pentium-class workstations. These labs connect to the college's gigabit fiber-optic backbone via 100Mbps Ethernet connections. The college also provides open-area computing facilities, which are available to students 24 hours a day, 365 days a year. In addition to the Ethernet network, the college has set up a wireless server infrastructure for students who may want to use their own laptops to connect to the college's computing resources. The college proudly maintains a 99.999% up-time availability of computing resources. The college also provides remote dial-in capability to all student, faculty and staff. The dialup hardware consists of several digital circuits and digital remote access servers allowing up to 70 concurrent dial-up users. This allows the users to perform research and other activities while they are away from the college.

The Multimedia Services unit provides PDF interactive CD-ROM production and copying, desktop publishing, graphic design for screen and print, website design, 3D modeling and animation, and video production and editing services. In the web group, the multimedia staff has developed web applications creating online forms, surveys and other database-driven services the college provides to faculty, staff, students, alumni and industry and research partners. Multimedia technical support staff, while troubleshooting and maintaining the equipment in multimedia classrooms, also provides how-to assistance to faculty and staff in the use of the technology-based curriculum delivery equipment in conjunction with communication services network and system administrators and staff.

The multimedia and distance learning section houses a professional-quality video studio and a complete video and audio editing post-production facility. This facility operates the college's branch of the statewide Florida Engineering Education Delivery System (FEEDS). FEEDS is a joint effort among the state universities of Florida to provide engineering education to working students by collaborating with industrial and cooperating centers to deliver courses to sites throughout Florida. The college's FEEDS studio classroom and control room supports a full-service sound and video recording, and editing production facility while providing a synchronous, two-way interactive link to FSU's Panama City, Florida, branch. As a support unit for distance learning at the college, the multimedia and distance learning section provides training and technical support for faculty and staff in the migration of curricula toward synchronous and asynchronous web-based distance and distributed delivery of engineering courses.

The college operates several labs intended to foster learning opportunities for students and research advancement by faculty. They include the Advanced Mechanics and Materials Lab; the Microimaging Nuclear Magnetic Resonance Lab; Advanced Composite Manufacturing Lab; Computer Impact Simulation Lab; Highway Engineering Lab; the Biomagnetic Engineering Lab; the Electromagnetics Research Lab; Electronic Materials Research Lab; Microwave Anechoic Chamber; the Fluid Mechanics Research Lab and Computational Fluid Dynamics facilities at CSIT; and the High-performance Computing and Simulation Reasearch Lab. The college also maintains close working relationships with university research units including the Institute for Molecular Biology, Materials Research and Technology Center (MARTECH), the National High Magnetic Field Laboratory (NHMFL), Center for Nonlinear and Nonequilibrium Aeroscience (CENNAS), Geophysical Fluid Dynamics Institute (GFDI), the School of Computational Science and Information Technology (CSIT), the Institute for Transportation Technologies (ITT), the Florida Advanced Center for Composite Technologies (FAC^2T), the Industry-University Cooperative Research Center (NSF-IUCRC), and the Center for Advanced Power Systems (CAPS).

Opportunities

A large number of graduate students in the College of Engineering are supported through department teaching assistantships or research assistantships. University fellowships are available for exceptionally qualified students. In addition, tu-

ition waivers for graduate assistants and fellows are available on a competitive basis. Students should contact the department of their proposed major regarding financial support.

College Admission Requirements

A candidate must meet the following minimum criteria to be considered for admission into the graduate program:

1. A bachelor of science degree in engineering or a closely allied field from an accredited institution of higher learning;

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. A score of at least 1000 on the Graduate Record Examinations (GRE), quantitative and verbal portions combined. All candidates must submit official exam scores prior to being admitted as a regular graduate student;

4. A minimum of 550 on the TOEFL examination (for international students only); and

5. Satisfy any admission requirements of the department.

Master of Science Degree

All departments offer a thesis-based program for the master of science degree. The thesis-based programs are designed to provide the student with advanced course work and experience in the chosen engineering discipline. Nonthesis programs (not available in electrical engineering) 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. For additional departmental requirements, consult the degree requirements under each department.

Doctor of Philosophy 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 chemical, civil, electrical, industrial, and mechanical engineering departments. The Department of Chemical Engineering also offers a PhD in biomedical engineering.

For further details on graduate or research programs, see the college website at *http://www.eng.fsu.edu* or contact the Office of Graduate Studies, *(850) 410-6369; gradstudy@eng.fsu.edu.*

COLLEGE OF HUMAN SCIENCES

Dean: Penny A. Ralston; *Associate Dean*: Bonnie Greenwood, 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; *Dean Emerita*: Margaret A. Sitton

The mission of the College of Human Sciences is to address global challenges and opportunities related to the physical, behavioral, 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 only comprehensive doctoral-granting institution in the human sciences in the state of Florida. For more than 15 years the College of Human Sciences has been one of the top 10 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 Textiles and Consumer Sciences.

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 holder of the Tyner Eminent Scholar Chair rotates among departments in the college. 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); Jerry 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.)

Additional eminent scholar chairs in the college include the Bert Family Eminent Scholar Chair which was established in 1995 and is earmarked for The Florida State University Family Institute, and the Lincoln Chiropractic College Eminent Scholar Chair in biomechanics, established in 1996.

Facilities and Fellowships

Special laboratories that enhance and enrich the student's education include: 1) **Lectra Computer-Aided Design Laboratory**; 2) the **Burdines Merchandising Technology Laboratory;** 3) the **Historic Clothing and Textile Laboratory**, which houses the Carter Collection of Peruvian Textiles and the most extensive collection of accessories and children's and women's wear in the Southeast; 4) a **Resource and Technology Center** which includes textbooks, reference materials, tapes, and other resources; 5) chemical, analytical, and microbiological laboratories for food and nutrition science majors; 6) the exercise physiology laboratory for monitoring the effect of exercise on metabolism for nutrition and fitness majors; 7) the motor learning/control laboratory for the study of cognitive processes and neural mechanisms controlling movement; 8) chemical and physical textile laboratories with a conditioning room and sensory evaluation laboratory; and 9) a state-of-the-art computer laboratory.

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 through the academic common market, which allows their students to pay in-state tuition. Prospective out-of-state students may contact the college to see if their state is a member of the academic common market.

College fellowships and assistantships are available. Nomination for these fellowships/assistantships are made by the department. There are also graduate teaching and research assistantships available in each departmental area. 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

Clothing, Textiles, and Merchandising with the following areas of emphasis:

- Apparel Product Development
- Housing
- Merchandising
- Textiles

Family, Child, and Consumer Sciences with the following area of emphasis:

- Family and Child Sciences

Family and Consumer Sciences Education

Food and Nutrition with the following areas of emphasis:

- Clinical Nutrition
- Food Science
- Nutrition Education and Health Promotion
- Nutrition Science
- Sports Nutrition

Movement Science with majors in:

- Exercise Physiology
- Motor Behavior

Doctor of Philosophy Degree Programs

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

- Apparel Textile Product Development
- Child Development
- Family and Consumer Sciences Education
- Family Relations
- Food Science
- Human Nutrition
- Merchandising

Movement Science with majors in:

- Exercise Physiology
- Motor Behavior
- Neuroscience

Marriage and the Family

Certificate Program

The College of Human Sciences participates in the interdisciplinary graduate certificate program in museum studies through the Department of Textiles and Consumer Sciences. Designed to prepare students for museum careers, students are required to take four core courses (twelve [12] semester hours) in museum basics, business, objects and education; and a museum internship (six [6] semester hours) along with their regular departmental degree program.

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, or a total quantitative/verbal test score on the Graduate Record Examinations (GRE) of 1000 or higher. All prospective students must take the GRE prior to admission regardless of their grade point average. Applicants for the doctoral programs must have three letters of recommendation. The PhD program in marriage and the family requires personal interviews at the time of application to the program.

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-type options: special project, practicum, and all course work. 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.

The College of Human Sciences has developed policies in compliance with University policies for the master's degree program. The college's policies are given to students the first semester they enroll to guide them throughout their studies.

Doctoral Degree Program

The graduate faculty 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 studies, 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 6938r, Proseminar in Home Economics (1–2). There is no college-wide foreign language, statistics, or other research tool requirement for the doctor of philosophy degree. Each department prescribes its own requirements.

SCHOOL OF INFORMATION STUDIES

Dean: Jane B. Robbins; *Associate Deans:* Kathleen Burnett, Don Latham; *Assistant Dean:* Robert Brooks

The fields represented in library and information studies offer some of the most diverse and fascinating professional opportunities available today. Information professionals are engaged in the business of helping people locate and obtain the information they need for living and decision making.

Information studies offers the opportunity to blend concerns for human needs for information with involvement in cutting-edge technology and systems for acquiring, storing, organizing, and delivering information. The tasks of fitting information resources to human needs rather than forcing human needs to fit information systems is the critical function of the information professional.

Information studies is an interdisciplinary field that offers diversity and opportunities based on growth and expansion. Graduates have the opportunity to make vital connections between people and the information they want and need.

The School of Information Studies at The Florida State University is one of the top-ranked programs in the nation and has held such ranking for many years. The program is old enough to have stability and tradition but young enough to still be growing and not resting on past accomplishments.

The School of Information Studies at The Florida State University was established in 1947 as a professional school. The master of science 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 in 1968 to offer the doctor of philosophy degree and in January 1997 to offer the specialist degree.

The school has a dynamic faculty that is highly visible in professional offices, professional conferences, publications, and significant research projects in the field. This professional activity translates directly into a rich intellectual environment and better opportunities for graduates.

The School of Information Studies is proud to have produced graduates who occupy positions of significant leadership and responsibility.

Facilities

The Louis Shores Building houses all the classrooms, plus laboratories for information organization, computing, and multimedia production. The **Harold Goldstein Library** includes professional materials and juvenile and young adult literature collections. The school provides a network with fiber optic connections to the University's communication system. Students may study on or off campus utilizing network technologies.

Scholarships, Awards, and Financial Aid

There are a number of financial aid sources which are administered by the school, as well as those sources administered by the University. Applications and criteria for selection may be obtained by writing, emailing or calling the school.

Graduate Assistantships. The school administers a program of graduate research, service and instructional assistantships, which require work in the school assisting faculty in teaching and research, staffing the school's library and laboratories, or assisting the school's web development team. Stipends for these awards vary depending upon the specific assignment. To be considered for these awards, students should complete the school's application for graduate assistantships available on the school's website at *http://www.lis.fsu.edu.*

Scholarships and Fellowships. The school administers a program of scholarships resulting from the generosity of alumni and other friends. To be considered for a scholarship, students should complete the school's application for scholarships. Information about specific scholarships and fellowships is provided on the school's website: *http://www.lis.fsu.edu*. In addition to these sources, prospective students should consult the website of the American Library Association, *http://www.ala.org.*

Requirements for All Incoming Graduate Students

All new main campus graduate students who enter the School of Information Studies beginning in Fall 2004 are required to provide their own laptop computer and the appropriate software. Specific information may be found on the school's website at *http://www.lis.fsu.edu.*

Master's Degree Program

Students will gain the basic theoretical foundation, knowledge, and introductory skills necessary to function effectively in entry-level professional positions in the field of library and information studies.

1. Students will interpret the role of the information profession and will be aware of its conceptual framework as a basis for their entry-level practice in a variety of information environments in a multicultural society;

2. Students will demonstrate an introductory knowledge of the present and future roles and functions of information professionals in relation to the environments in which they operate;

3. Students will demonstrate a knowledge of the basic principles of professionalism to analyze critically their roles and establish future directions for the profession;

4. Students will demonstrate a 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;

5. Students will become acquainted with major information environments and recognize the similarities, differences, and interrelationships of these settings;

6. Students will gain an introductory knowledge of techniques and skills that underlie basic information activities, and, in selected areas, more advanced techniques;

7. 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; and

8. 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.

Two types of programs are available at the master's level:

Master of Science Program. Requirements are outlined below under 'Degree Requirements.'

Master of Arts Program. In addition to the requirements outlined below under 'Degree Requirements,' see the 'Special Master of Arts Requirements' in the "Graduate Degree Requirements" chapter of this *Graduate Bulletin.*

The School of Information Studies features web-based courses that permit graduate students to earn a master's or specialist's degree without coming to campus. Additional information about this opportunity is available at: *http://www.lis.fsu.edu.*

Degree Requirements

The master's degree program consists of a minimum of forty-two (42) semester hours of graduate courses. Students are required to take the following core courses: LIS 5271, Research in Information Studies; LIS 5408, Management of Information Organizations; LIS 5411, Introduction to Information Policy; and LIS 5703, Information Organization. In addition, students may

choose one of five concentrations or, in consultation with their faculty advisor, they may develop a general concentration. Students must take an additional required course within their chosen concentration plus five elective courses within the concentration, for a total of eighteen (18) semester hours in the concentration. The five concentrations and their required courses are the following: Information Architecture; Information Needs of Youth (required: LIS 5564, Information Needs of Children, **or** LIS 5565, Information Needs of Young Adults); Information Policy and Management ; Information Technology Management (required: LIS 5484, Managing Networks and Telecommunications, **or** LIS 5782, Database Management Systems); and Knowledge Management (required: LIS 5603, Introduction to Information Services.) The remaining course work may be selected from other concentrations.

Admission Requirements

Admission to the school is a two-step process involving completion of a personal form for the school and completion of an application for admission to a graduate program at the University. Both applications may be obtained online at *http://www.lis.fsu.edu.*

All applicants must meet the University's standards for admission including:

1. Possession of a baccalaureate degree from an approved college/university;

2. Presentation of evidence of a grade point average (GPA) of at least 3.0 (4.0 = A) in the last two years of the baccalaureate degree (or of a 3.0 on a master's degree from an accredited university) **or** a minimum score of 1000 on the combined verbal/quantitative portions of the Graduate Record Examinations (GRE); and

3. Presentation of a minimum TOEFL score of 550 by international students.

Note: all students must submit a GRE score regardless of GPA.

The school reserves the right to use stricter admission standards than the University's minimum requirements. Students are admitted to the master's program in the Fall only.

Language Requirement

There is no foreign language requirement for the master of science degree in library and information studies. There is a foreign language requirement for the master of arts degree.

Applicants may be required to furnish additional personal information upon request.

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 website for requirements at *http://www.lis.fsu.edu.* Select "Prospective Student" and "Graduate." Students seeking certification must do so as part of a graduate degree program in information studies.

International Internships

The school administers internship opportunities in conjunction with The Florida State University International Programs. Internships are currently available in London, Florence and Panama for one-semester or one-year periods.

Master's Degree Time Frame

The work for the master's degree must be completed within seven years from the time the student first registers for graduate credit. Graduate students must maintain an average of "B" (3.0) or better in all work taken at the graduate level. No course with a grade below "C" (2.0) will be credited toward a graduate degree, and no student is eligible for the conferral of a degree if the overall grade average is less than a "B".

Students whose grades fall below "B" in any semester are placed on academic probation for the next term; academic dismissal may follow if the minimum GPA is not achieved in the following semester.

Master's program students are admitted only in the Fall semester.

Specialist Degree Program

The specialist degree program addresses the need for information professionals to become aware of new areas within the field and to improve skills and/or develop additional competencies. This program is based on the identified needs of the information professional and is planned cooperatively between students and faculty members. Students will acquire the knowledge and competencies to perform at higher levels within their area of professional interest. Students will develop the capabilities to assume leadership roles in the profession and society. Program objectives are:

1. The student will achieve an in-depth knowledge of new developments and trends in library and information studies;

2. The student will gain an increased expertise in area(s) of specialization; and

3. The student will gain increased insights into the importance of the information profession.

This degree requires thirty (30) semester hours beyond the master's degree and may be completed in summers only or within a calendar year of full-time enrollment. Students enrolled in the specialist program should consider their individual needs and professional development in the selection of courses either in the School of Information Studies or in another department. Each specialist candidate who has been accepted should plan a program with the major professor at the earliest opportunity.

For further information, consult the school's website: *http://www.lis.fsu.edu.*

Each applicant will be considered individually. Admission will be based, generally, on previous academic performance, individual interest and need, and professional promise. A GPA of 3.2, a score of l000 on the GRE, and three letters of reference are minimum admission criteria. The school reserves the right to set higher admission standards.

Doctor of Philosophy Program

The goals of the doctoral program are: 1) to prepare graduates to demonstrate mastery of a major aspect of library and information studies as evidenced by the successful completion of a preliminary examination; and 2) to prepare candidates to demonstrate mastery of an area of specialization in library and information science and in the appropriate research methodologies as evidenced by the successful completion of a doctoral dissertation.

The doctor of philosophy degree (PhD) is a research degree awarded as the result of independent and comprehensive scholarship in a particular field. There is no specific semester hour requirement beyond a minimum of two consecutive regular semesters in residence. All students must be enrolled for a minimum of twelve (12) semester hours of graduate credit per semester; however, twenty-four (24) semester hours do not constitute the full course program. Each student's program will be planned to ensure a mastery of the field before the preliminary examination. Students must consult their major professors prior to enrolling in their programs to plan the course work necessary for the completion of their requirements.

Admission Requirements

Admission to the PhD program is selective, based upon the assessment of a number of factors which, when taken together, provide evidence that the applicant possesses superior scholastic ability, has the potential for success in a rigorous graduate program of research study, and will perform well within the broad context of the information profession. 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 interview; and

6. A personal statement that gives career objectives and describes the research interests and the specific qualifications of the applicant to pursue doctoral work.

Additional information concerning application materials is available on the school's website at *http://www.lis.fsu.edu*.

Applicants generally will hold a graduate degree (or its equivalent) from a program accredited by the American Library Association; however, individuals with superior qualifications who possess graduate degrees from programs such as computer science, communication, educational technology, or linguistics are encouraged to apply.

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.

Completed applications are evaluated by the doctoral program team, which looks at the totality of the qualifications possessed by the applicants. 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 submitted by April 15th. To be considered for all available financial assistance and to take advantage of the optimal sequence of courses, prospective students are permitted to enroll during the fall semester only. Students whose records indicate a need to do additional preparatory work may be counseled to enroll earlier.

Prospective doctoral students are encouraged to consult the school's *Guidelines for Doctoral Students* for further information, available on the school's website at *http://www.lis.fsu.edu.*

Study for International Students

The School of Information Studies welcomes applications from qualified international students and is pleased to have many distinguished information professionals from other countries among its alumni. The school customarily has international students in residence from a variety of countries. The school has a number of faculty with international experience and interests and believes that it offers a hospitable and productive environment for study by international students.

International Students Requirements

The Florida State University requires that all international students meet the following requirements. The student should:

1. Have at least a baccalaureate degree (or equivalent) from an approved college or university;

2. Be in good standing in the institution of higher education last attended;

3. Present evidence of a GPA of at least 3.0 on a 4.0 scale (where A = 4.0) as an upper-division undergraduate student or equivalent, determined by the University's Office of Admissions, or a 3.0 on a 4.0 scale on a master's degree from an accredited/approved institution, or a minimum score of 1000 on the combined verbal and quantitative portions of the general (aptitude) test of the GRE; and

4. Achieve a score of 550 or higher on the TOEFL (Test of English as a Foreign Language) examination.

Note: all students must submit a GRE score regardless of GPA.

In addition to these requirements, international students must meet the specific requirements of the School of Information Studies for the program in which they wish to enroll. The school reserves the right to set admission standards higher than the University's minimum requirements.

Because of the detailed information and the special processing required for admission of an international student, prospective students must complete their application at least six months prior to the fall term in which they wish to enroll.

International students are urged to contact both the School of Information Studies and the University's Office of Admissions as soon as possible.

Financial Aid for International Students

The School of Information Studies does not have scholarships which can be awarded to international students. In general, the school is not in a position to award financial aid to international students in the initial semester of enrollment. The school does have a small number of assistantships for which international students may apply in their second and subsequent semesters, although these awards are generally quite competitive.

Certificate in Museum Studies

The school participates in the Museum Studies Certificate Program, in conjunction with the College of Arts and Sciences, the School of Visual Arts and Dance and the College of Human Sciences. The interdisciplinary program combines courses from the School of Information Studies with courses focused on specific museum topics. Additional information about the certificate program is available from the graduate advisor.

COLLEGE OF LAW

Dean: Donald J. Weidner; *Associate Deans:* Donna R. Christie, Mark B. Seidenfeld; *Assistant Deans:* Nancy L. Benavides, Stephanie L. Williams; *Director of Law Library:* Edwin M. Schroeder; *Edward Ball Eminent Scholar Chair:* Frederick M. Abbott; *Tobias Simon Eminent Scholar Chair:* Fernando Tesón

The Florida State University College of Law provides a three-year program of study leading to the juris doctor (JD) degree, the first law degree that American law students can earn. The JD degree is a requirement for admission to any state bar and is a prerequisite for the practice of law.

The purpose of the College of Law is to prepare highly qualified graduates for positions as counselors, advocates, judges, law-oriented business professionals, researchers, teachers, and philosophers of the law.

The College of Law faculty are among the national leaders in high-level scholarship. The faculty's interests range from fundamental legal doctrine to cutting-edge interdisciplinary work, from issues of local concern to national and international areas, from matters of day-to-day practice to the purest of legal theory. Members of the faculty have written leading texts and treatises in such fields as evidence, environmental law, partnership law, international law, international intellectual property, law and economics, and constitutional law.

Small class sizes allow for free-ranging discussion in the classroom, as do a wide range of seminar offerings and individualized learning opportunities. The faculty is highly accessible, which makes it possible for discussion to continue outside the classroom on a personal basis.

The student body at the College of Law is diverse, which adds to the quality of the school. Well over one hundred undergraduate and graduate institutions from all over the world are represented, as are most states and a good many nations. Many students have significant non-academic experience as well, ranging from engineering to medicine to business to government. This range of backgrounds and interests is displayed in the great variety of student organizations and activities at the College of Law.

Among the College of Law's strengths are international law, and environmental and land use law. The College of Law recently has introduced certificate programs in both of these areas, which allow students who successfully complete the programs to receive a certificate along with their JD degree, indicating to employers and others that they have achieved special competency in these fields.

The faculty expertise in the College of Law's international law program covers a broad spectrum of study, including international intellectual property, environmental, human rights law, trade and commercial law. The international law program is strengthened by its affiliation with other programs at the law school and University that are focused on international issues. The **Caribbean Law Institute** has assisted in developing commercial laws among Caribbean nations. The **Center for the Advancement of Human Rights** is an information clearinghouse for those who study human rights abuses around the world and offers students valuable internship experience. Students can also gain additional co-curricular experience through Florida State University's *Journal of Transnational Law &Policy* and by participation in the Jessup International Moot Court Competition and the International Law Society. The College of Law also offers those students interested in environmental and land use law the opportunity to participate in the *Journal of Land Use & Environmental Law*. Founded in 1983, it is the oldest journal of its type in Florida, and one of the oldest in the nation.

The location of the college in relation to the state capitol complex provides a wide range of internship and clerkship opportunities, as well as part-time employment opportunities, during the second and third years. Judges and lawmakers frequently speak/teach at the College of Law.

While these collateral opportunities are no substitute for the day-to-day study and experiences of the classroom, one of the aims of legal education is the teaching of law in its broader contex. The College of Law's location provides this context, giving it special advantages.

The college offers over 60 externship programs, which involve either full-time or part-time placement at courts and state agencies. Each program provides practical experience under extensive academic direction to selected upper-level students. At this time, the programs encompass six judicial placements, several administrative agency placements, and a number of criminal and civil "lawyering" programs which require students to be certified to practice under the Florida Bar's Student Practice Rule. The College of Law also offers an externship placement with the International Bar Association in London.

Additionally, the college's **Children's Advocacy Center** provides 30–45 students the opportunity to directly represent clients under the supervision of law faculty.

The Law Library is located in its own building which opened in 1983 and provides the most up-to-date legal research facility available in Florida. It consists of over 46,000 linear feet of shelving and seating capacity for over 400 at carrels or tables and in enclosed conference rooms, typing rooms, group study rooms, and computer assisted legal research and microcomputer labs.

Law Library collections exceed 444,000 volumes and volume equivalents with more than 155,000 cataloged titles. Continuing subscriptions number more than 4,900. Law Library personnel provide training in LEXIS and WESTLAW; word processing programs are provided for student use on microcomputers available in the computer laboratory.

Special collections in the Law Library include rare legal materials from England, the United States, and Florida. Early printed editions of Bracton, Coke, and Glanville are held, as well as more recent publications, including a first edition of Blackstone's *Commentaries*. There is a substantial collection of signatures, letters, signed portraits, and other memorabilia of the justices of the United States Supreme Court.

Law students also have access to the Paul M. Dirac Library and the Robert Manning Strozier Library of The Florida State University. Furthermore, the State Library of Florida, the Florida State Archives, and the Florida Supreme Court Library are within two blocks of the College of Law.

Interdisciplinary and Joint-Degree Programs

In order to further the goals of broad liberal arts education and scholarship, the College of Law has authorized interdisciplinary work for selected graduate students. Joint-degree programs, in which students receive both the juris doctor and the master's degree concurrently, are offered with the College of Business, the Department of Economics, the Department of Urban and Regional Planning, the Program in International Affairs, the School of Social Work, the School of Information Studies, and the School of Public Administration and Policy.

Upon the recommendation of the department chair, and with the permission of the Dean of the College of Law, a graduate student may take a limited number of College of Law courses related to the major field of study. Grades are reported on a satisfactory/unsatisfactory (S/U) basis.

Credit hours earned in law courses prior to admission to the College of Law are not counted toward the minimum hours required for the law degree upon subsequent admission to the College of Law.

Additional information regarding law programs is contained in the College of Law Bulletin available from: *Office of Admissions, College of Law, The Florida State University, Tallahassee, FL 32306* or at *http://www.law.fsu.edu.*

Summer Program in Law at Oxford

Director: Edwin M. Schroeder

The College of Law conducts the oldest summer program in Oxford sponsored by an American law school. Since its establishment in 1973, law students from the United States and Canada and 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. The five and one-half week program begins annually on the Tuesday following Oxford's Trinity term.

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/academic_programs/interational_law/oxford.*

Degree Requirements

Eighty-eight (88) semester hours of course credit and six full semesters of residency are required for the JD degree. The following courses are currently required of all students: legal writing and research I (2), legal writing and research II (2), contracts I (3), contracts II (2), civil procedure (4), criminal law and procedure (4), torts (4), property I (2), property II (3), constitutional law I (3), constitutional law II (3), and professional responsibility (3). In addition to the courses listed above, each student must take an extensive writing course to fulfill the upper-level writing requirement.

Mindful of the special responsibility of lawyers in light of the monopoly given them, particularly as to those individuals who need and cannot afford their services, the College of Law has instituted a pro bono graduation requirement. Each degree-seeking student must do a minimum of 20 hours of *pro bono* work on behalf of indigent individuals or other uncompensated legal work in conjunction with an individual attorney, law firm, or organization on behalf of a disadvantaged minority; the victims of racial, sexual, or other forms of discrimination; those denied human and civil rights; or other work on behalf of the public interest.

Academic Policies

All academic policies of the College of Law can be found in the *College of Law Student Handbook*, which is made available to all students who enter the college.

The first-year curriculum is mandatory for all students. Currently, first-year students register for fifteen (15) semester hours during the Fall semester and fourteen (14) semester hours during the Spring. All other students must register for a minimum of twelve (12) semester hours of credit each Fall and Spring semester. Students may register for a maximum of eighteen (18) credit hours during the Fall and Spring semesters. Attendance during the Summer semester is not mandatory, nor is a specific credit hour requirement imposed.

In order to obtain the JD degree, in addition to the eighty-eight (88) semester hour requirement, students must earn a minimum of six semesters in residence. Twelve (12) semester hours of course credit are required to earn one semester of residency during the Fall and Spring terms.

The Florida State University College of Law is a full-time law school in accordance with the standards set by the American Bar Association. The minimum credit hour load requirement is designed to ensure that law students participate in their law studies on a full-time basis.

Authorization for less than the twelve (12) semester hour requirement will not be granted on the basis of the student's need for outside employment. Students are restricted to 20 hours of employment per week.

Attendance at all regularly scheduled classes is expected of all law students. Instructors will announce their specific attendance policy at the beginning of each term's classes. Chronic unexcused absences may result in the student being dropped from the course or being awarded an administrative "F" grade.

Admission Requirements

Admission standards to the college have increased greatly in recent years. Although the admissions committee begins reviewing files in January, many decisions are not made until mid-March. In making admissions decisions, the committee considers quantifiable factors, such as LSAT scores and grade point averages, as well as letters of recommendation, personal statements, extracurricular interests, and work experiences.

The college actively recruits minority students. The student body of the college brings a diverse occupational and educational perspective to the school.

The college does not prescribe a specific undergraduate major. All applicants are required to have a baccalaureate degree from a nationally or regionally accredited college or university prior to commencing law study.

Every applicant must take the Law School Admissions Test (LSAT) administered by Law School Admissions Services. The LSAT is given in June, October, December, and February of each year. It is administered at The Florida State University and at test centers throughout the world. The test should be taken as early as possible so that applications can be acted upon without unnecessary delay. Scores from the February administration of the LSAT are the latest accepted for entrance into the next August entering class.

Applicants must register with the Law School Data Assembly Service (LSDAS), provided by Law School Admissions Services. An official transcript from every college attended is sent directly to LSDAS, which analyzes transcripts and sends results to the College of Law. Applicants register with LSDAS at the same time they register for the LSAT.

For application materials contact: *Director of Admissions, The Florida State University, College of Law, Tallahassee, FL 32306-1601; (850) 644-3787* or at *http://www.law.fsu.edu*.

Financial Aid

Stafford Loans. These educational loans are available directly through banks, credit unions, savings and loan associations, and other participating lenders. The Federal Stafford Loan is based on financial need. Interest is paid by the government while the student is in school. The Unsubsidized Federal Stafford Loan is available to students who do not qualify in whole or in part for the subsidized Federal Stafford Loan. It is not based on need, and interest is not paid by the government but accrues while the student is in school.

To apply for the Federal Stafford/Unsubsidized Stafford Loans, a student must complete the Free Application for Federal Student Aid (FAFSA). These applications are available in the *Office of Financial Aid, 4400 University Center, The Florida State University, Tallahassee, Florida 32306.*

University fellowships in the amount of $10,000 are available to law students with exceptional credentials. Additional scholarship and fellowship information can be found in the College of Law application brochure.

Student Services

The assistant dean for student affairs assists students in all facets of student life, from financial aid to the adjustment to law school. The office of career placement within the college assists students in finding employment both during and after law school.

A special orientation program for all new students is held during the week prior to the beginning of classes to acquaint students with the college.

COLLEGE OF MEDICINE

Dean: J. Ocie Harris; *Associate Dean for Academic Affairs:* Alma Littles; *Associate Dean for Health Affairs:* Robert Brooks; *Associate Dean for Research:* Carol Van Hartsveldt; *Associate Dean for Student Affairs:* Myra Hurt; *Assistant Deans for the Regional Medical School Campuses:* Anthony Costa, Orlando Campus; Paul McLeod, Pensacola Campus; Eugene Trowers, Tallahassee Campus; *Director of the Clinical Learning Center:* Sarah Sherraden; *Director of the Medical Library:* Barbara Shearer

The Florida State University College of Medicine has the initial provisional accreditation of the Liaison Commitee 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 medical degree (MD). The MD degree is a requirement for taking the United States Medical Licensing Examination (USMLE), and is a prerequisite for licensure for the practice of medicine in the United States.

The mission of the College of Medicine is to train generalist physicians for practice in ambulatory settings, specifically, to serve under- served populations, i.e., rural, inner city and geriatric patients in the state of Florida. The curriculum focuses on preparing primary care practitioners for Florida's underserved senior, rural and inner-city populations, but the Florida State University College of Medicine student selection process and the comprehensive physician training program does not exclude students interested in specialty medicine. 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, will be taught at The Florida State University and will be housed, upon completion of construction, in a new facility.

Clinical training in the medical school curriculum, occurring in years three and four, will be community-based. For clinical training, the community-based model ensures students training in a variety of practice settings including rural and inner-city hospitals, nursing homes, clinics and doctors' offices. Clinical training sites will be located in Tallahassee, Pensacola, Orlando, Jacksonville, Sarasota and in the rural north Florida communities of Marianna and Perry. Students will be connected to the College of Medicine and the respective community deans through cyber-linked hand held data units. Through these units students can access medical information, communicate with the College of Medicine main office, and record and evaluate their clerkship and preceptorship experiences.

The Florida Legislature and the Governor's Office have shown a commitment to developing a premier medical education program in the College of Medicine by including a new College of Medicine building which will house the educational program. It will serve as the hub for the extensive electronic network which will connect all faculty and students at several locations throughout Florida. Construction of the facility which will house student support facilities, administrative offices and academic units is underway. 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 and at clinical sites elsewhere in Florida have been established.

The Medical Library

The Florida State University College of Medicine has developed a 21st century library which is accessible to all faculty and students. The medical library is located in the College of Medicine transitional space. The library provides the most up-to-date, on-line resources for medical research and reference and houses current journals and books. The library maintains instructional support systems which utilize the latest technology and contain information appropriate to their basic science and clinical studies. The library also holds 650 shelf copies and provides access to a number of paper and on-line journals.

The medical library contains videotape records of clinical experiences of students, clinical lectures, problem-based-learning cases, and topical conferences and seminars.

Medical students also have access to the Paul M. Dirac Library and the Robert Manning Strozier Library of The Florida State University.

The Clinical Learning Center

The Clinical Learning Center, located in the transitional space of the College of Medicine, is a state-of-the art teaching and assesment 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. Six examination rooms and one consultation room are equipped with audio-visual equipment 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 finds, the Clinical Learning Center provides support for faculty in small group courses to help teach students' communication and physical exam skills.

Degree Requirements

The four years of medical education are divided into two years of basic science/preceptorship experiences, one and one-half years of clinical clerkships, and one-half year of post-clerkship electives or required course remediation or review. Students must successfully pass the USMLE Step 1 test and an Observed Structured Clinical Examination (OSCE) at the end of the second year and the USMLE Step 2 and a graduation OSCE at the end of the fourth year in order to move to the next level of study and graduate. The curriculum is undergoing constant evaluation and refinement; therefore, changes will occur to improve the educational program as a student progresses through the four years of study.

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 when interacting with patients, colleagues, faculty and staff by exhibiting caring and compassionate attitudes. Professional behavior encompasses altruism, accountability, compassion, devotion to duty, the practice of excellent medical care and respect for others. These qualities and behaviors are evaluated as students are observed in relevant settings. In conferring the MD 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 of medicine.

Academic Policies

All academic policies of the College of Medicine can be found in the College of Medicine Student Handbook, which is made available to all students who enter the college and on-line at *http://med.fsu.edu/education.*

All basic science courses and clerkships so noted are mandatory for all students. The first year is a twelve-month curriculum. The second year is nine-months. The third and fourth years are eleven-months each.

The four-year Florida State University College of Medicine is a full-time allopathic medical school in accordance with the standards set by the Association of American Medical Colleges and Schools Liaison Committee on Medical Education. The minimum credit hour load requirement for each cohort is designed to ensure that the full-time medical student will complete their medical studies within a four-year period of time.

Authorization for less than the full-time status will be granted by the Dean of the College of Medicine upon the recommendation of the Evaluation and Promotion Committee (EPC) and the Associate Dean for Student Affairs. A recommendation of an extension of attendance time by the EPC will be based on a compelling need as presented by the student.

Admission Requirements

The inaugural class of the Florida State University College of Medicine (FSUCOM) was admitted to medical school at Florida State University in May of 2001. Admission to the College of Medicine is a highly competitive process with between 800 and 1200 applications processed 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 mission to select 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 which values teamwork and the doctor/patient relationship. The College of Medicine is searching for students who have demonstrated through their lifestyle a commitment of service to others and encourage 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 Advising Office in the College of Medicine or on the College of Medicine website 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 May.

Financial Aid

Stafford Loans. These educational loans are available directly through banks, credit unions, savings and loan associations, and other participating lenders. The Federal Stafford Loan is based on financial need. Interest is paid by the government while the student is in school. The Unsubsidized Federal Stafford Loan is available to students who do not qualify in-whole or in-part for the subsidized Federal Stafford Loan. It is not based on need, and interest is not paid by the government but accrues while the student is in school.

To apply for the Federal Stafford/Unsubsidized Stafford Loans, a student must complete the Free Application for Federal Student Aid (FAFSA). These applications are available in the *Office of Financial Aid, A4400 University Center, Florida State University, Tallahassee, Florida 32306-2430.*

National Health Service Corps. Medical students in training for the specialties of family medicine, general pediatrics, general internal medicine, general psychiatry, or obstetrics/gynecology are eligible to apply for the repayment program supported by the Health Service Corps. A recipient must agree to provide primary care services in a priority health professional shortage area for a minimum period of 2 years. To receive more information about the National Health Service Corps, contact *1-800-221-9393*.

Additional scholarship and fellowship information can be found on the College of Medicine's website.

Student Services

The Associate Dean for Student Affairs assists students in all facets of student life, from financial aid to medical residency placement and medical career planning. Orientation programs for all new students are held in April and during the week prior to the beginning of classes in May. Student support coordinators provide assistance to students in Tallahassee and at the regional medical campuses as students progress through the College of Medicine.

SCHOOL OF MOTION PICTURE, TELEVISION, AND RECORDING ARTS

Dean: Frank Patterson

Established in 1989, the School of Motion Picture, Television, and Recording Arts (the Film School) is one of only seven university-based film conservatories in the country. In the short time the Film School has been in operation, it has quickly become recognized nationwide as an outstanding film program, offering both a bachelor of fine arts and a master of fine arts degree to those admitted. Both programs provide state-of-the-art film and video equipment and studio facilities for production and postproduction operations. Each of the two programs is served by a completely equipped production center. The Film School funds all student film and tape workshops and productions, including the graduate thesis films and undergraduate senior thesis film productions.

The expertise of the Film School's faculty reflects the direction and range the school will take in the future. Mr. Frank Patterson, Dean of the School of Motion Picture, Television, and Recording Arts, has more than 20 years experience in the film and television industry as a writer, director, producer, editor, and consultant. He is joined by 13 faculty members, all of whom are specialists in the areas of writing, directing, cinematography, editing, sound recording, and production management.

Faculty Distinctions

The Film School has a strong commitment to hiring experienced, working professionals who have both teaching skills and professional goals. The Film School's full-time faculty is comprised of working film makers with various specializations as writers, directors, producers, cinematographers, audio designers, production designers, and editors in both the theatrical and nontheatrical 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 master of fine arts program operates extensive film-production facilities for its graduate and undergraduate programs in the University Center "A" Building on The Florida State University campus in Tallahassee. The newest and finest facility 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 videodisc, videotape and DVD, a large production research library, and eleven editing rooms, of which three are digital, non-linear editing suites for picture and sound. Production facilities are available for both 16mm and 35mm production.

Graduate Degree Program

The program leading to a master of fine arts 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. Students work in production teams on narrative/dramatic films with each film being written, storyboarded, produced, directed, shot, recorded, and edited by graduate students. In addition, students are educated on the financial, legal, distribution, and exhibition aspects of the film business. The graduate program is designed and scheduled as a conservatory. It is meant to create a flexible and disciplined atmosphere where individuals can hone their talents, develop a body of work, and sharpen their capacities to work in teams.

Admission to the Graduate Program

Admission to the School of Motion Picture, Television, and Recording Arts graduate program is of limited access, with 24 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 submit a separate application directly to the graduate film school. All applicants must submit a 500–1000 word statement of purpose describing their artistic work, creative influences, personal objectives, relevant background, and career goals, as well as three (3) letters of recommendation, a professional resume, GRE scores, and two (2) official transcripts from each college or university attended. As an option, you may submit a sample of your best work (video, writing sample, etc.) Applications are available online at *http://filmschool.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 Film School requires that majors present proof of health and accident insurance (copy of policy showing the student as covered) prior to registration in the fall semester each year. Students are expected to maintain this insurance throughout their enrollment in the Film School. Registration will be administratively canceled at the end of the second week of classes for any students failing to provide proof of insurance.

Assistantships

A limited number of graduate assistantships are awarded by the School of Motion Picture, Television, and Recording Arts. Highly qualified students are nominated by the Film School for University-wide fellowships and minority fellowships. For more information regarding the availability of other sources of financial aid and potential scholarships, contact the Student Aid Resource Center at *(850) 644-4840*, or visit their website at *http://www.finaid.fsu.edu.*

SCHOOL OF MUSIC

Dean: Jon R. Piersol; *Assistant Deans:* Seth Beckman, George Riordan, Bentley Shellahamer.

The graduate program of the School 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 School of Music: the master of music degree in performance, accompanying, piano pedagogy, choral conducting, instrumental conducting, jazz studies, music theory, composition, musicology (both historical musicology and ethnomusicology), opera, and music therapy; the master of music education degree; the master of arts degree in arts administration; the doctor of philosophy degree in music education; the doctor of philosophy degree in music (specializations in historical musicology, ethnomusicology, and music theory); the doctor of education degree in music education; and the doctor of music degree in composition or in performance (piano, voice, violin, viola, violoncello, double bass, guitar, flute, oboe, clarinet, bassoon, saxophone, trumpet, horn, trombone, tuba, percussion, and organ). The doctor of philosophy degree in humanities with an emphasis in music is available from the College of Arts and Sciences. For more detailed information about these degree programs, consult the graduate studies office in the School of Music. All students working toward master's and doctoral degrees in music register directly in the School of Music.

Certificate Programs

In addition to its degree programs, the School of Music offers a number of certificate programs that provide an additional specialized area of emphasis for graduate students. These include certificate programs in church music, jazz studies, piano pedagogy, computers in music, early music, music of the Americas, world music, piano technology, pedagogy of music theory, special music education, harpsichord performance, college teaching, and organ performance. A postmaster's artist certificate in performance is available in opera, violin, viola, violoncello, and piano. Further information about admission to, and special requirements of, these programs is available from the graduate studies office.

Music Facilities

The School of Music enjoys excellent teaching, research, and performance facilities. The two School 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 School 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. Outdoor performances are scheduled during the fall and spring in the **Owen F. Sellers Music Amphitheatre**, while the 1,575-seat **Ruby Diamond Auditorium** provides an impressive environment for opera and major concert productions.

Music Library

The Warren D. Allen Music Library serves the students and faculty of the School 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 Kuersteiner Building. Costumes are constructed or alterations are made on rental costumes each semester. In addition, costumes are constructed for the 16th-century Madrigal Christmas Dinner and various opera workshop scene programs.

Organs

A 1975, 34-stop Holtkamp tracker (mechanical action) organ in Opperman Music Hall is used for recitals, concerts, and lessons. Practice organs include a 1976, 3-stop Holtkamp tracker; a 1973, 6-stop Wicks; a 1967, 4-stop Holtkamp; and a 1976, 4-stop portable continuo/chamber organ, also with mechanical action, by Holtkamp. A restored English chamber organ built by Hill and Davison in 1837–38 is available to organ students for practice and performance.

Assistantships

Graduate assistantships are available in most areas of study in the School of Music. Application forms for graduate assistantships are available from the graduate music office. The annual stipend varies from $3,000 to $6,000, depending upon the amount of service rendered, the nature of the service, and the qualifications of the student. Graduate assistants usually receive a waiver of a significant portion 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 Univer-

sity-wide admission requirements; and 2) meet School of Music requirements for specific degree programs. These may include auditions, interviews, 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.

Master of Arts 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 (7–8) semester hours in music core courses, fourteen (14) semester hours in arts administration core courses, eight to nine (8–9) semester hours in appropriate electives, and nine (9) semester hours in an arts administration internship in music.

Master of Music Performance

Voice, Organ, Violin, Viola, Violoncello, Double Bass, Harp, Guitar

Twelve (12) semester hours in applied music, including recital; two (2) semester hours in ensemble; two (2) semester hours in music bibliography; six (6) semester hours in music history and music theory; and ten (10) semester hours in music and/or nonmusic electives.

Piano

Twelve (12) semester hours in applied music, including recital; four (4) semester hours in solo piano literature; two (2) semester hours in ensemble; two (2) semester hours in music bibliography; six (6) semester hours in music history and music theory; and six (6) semester hours in music and/or nonmusic electives.

Accompanying

Eleven (11) semester hours in applied music, including recitals; two (2) semester hours in chamber music ensembles; two (2) semester hours in vocal or instrumental accompanying; four to six (4–6) semester hours in vocal or instrumental literature; two (2) semester hours in music bibliography; six (6) semester hours in music history and music theory; and seven to nine (7–9) semester hours in music and/or nonmusic electives.

Piano Pedagogy

Twelve (12) semester hours in applied music, including recital, practicum, and a research project; six (6) semester hours in advanced piano pedagogy; four (4) semester hours in keyboard literature; two (2) semester hours in accompanying; two (2) semester hours in music bibliography; six (6) semester hours in music history and theory; and two (2) semester hours in music electives.

Harpsichord

Twelve (12) semester hours in applied music, including recital; two (2) semester hours in ensemble; two (2) semester hours in music bibliography; six (6) semester hours in music history and music theory; two (2) semester hours in early keyboard literature; and eight (8) semester hours in music and/or nonmusic electives (continous playing and performance practice are recommended).

Woodwinds, Brasses, and Percussion

Twelve (12) semester hours in applied music, including recital; two (2) semester hours in ensemble; six (6) semester hours in wind pedagogy and wind literature; two (2) semester hours in music bibliography; six (6) semester hours in music history and music theory; and four (4) semester hours in music or nonmusic electives.

Multiple Wind Instruments

A candidate for the master of music degree, with the approval of a committee of wind faculty, may elect the master of music program in multiple wind instruments. Minimum requirements include eight (8) semester hours in major instrument, two to four (2–4) semester hours in minor instruments (choice of two), four (4) semester hours in recitals, two (2) semester hours in ensemble, six (6) semester hours in wind pedagogy and wind literature, two (2) semester hours in music bibliography, six (6) semester hours in music history and music theory, and zero to two (0–2) semester hours in music or nonmusic electives.

Performance majors must place at the MV–(B, K, P, S, V, or W) 5451–5456 level to be accepted into the program.

Off-campus or taped auditions qualifying for the MV– 5451–5456 level must be reaffirmed by an on-campus audition.

Choral Conducting

Fifteen (15) semester hours in choral literature, advanced choral techniques, choral and orchestral conducting, and choral conducting project recital; three to five (3–5) semester hours of applied music; two (2) semester hours in ensemble; two (2) semester hours in music bibliography or appropriate substitute; six (6) semester hours in music history and music theory; and four (4) semester hours in music or nonmusic electives.

Instrumental Conducting

Eight to ten (8–10) semester hours in wind ensemble/band or orchestral conducting and recitals; six (6) semester hours in music literature; eleven (11) semester hours in music history and music theory; four (4) semester hours in applied music; two (2) semester hours in music bibliography or appropriate substitute; zero to two (0–2) semester hours in ensemble; and three to five (3–5) semester hours in music electives.

Jazz Studies

Twenty-one (21) 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 (3) semester hours in college teaching in higher education; four (4) semester hours in applied music; two (2) semester hours in music bibliography; six (6) semester hours in music history and music theory; and two (2) semester hours in music and/or nonmusic electives.

Master of Music Theory

Twenty-one (21) semester hours in music theory, consisting of three (3) hours in readings in contemporary theory and analysis, six (6) hours in pedagogy of music theory, three (3) hours in history of music theory, three (3) hours in 16th-century counterpoint or fugue, three (3) hours of Schenkerian analysis, and three (3) hours of atonal analysis; five (5) semester hours in music history; two (2) semester hours in music bibliography; six (6) semester hours in thesis; and three (3) semester hours in nontheory 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 Composition

Six (6) semester hours in composition, three (3) semester hours in readings in contemporary theory and analysis; six (6) semester hours in pedagogy of music theory; six (6) semester hours in advanced theory courses; two (2) semester hours of music history; two (2) semester hours of applied music; six (6) semester hours in thesis; and three (3) semester hours in a music or nonmusic elective. The degree will be awarded upon completion of a 30-minute chamber recital of new works, a written and oral comprehensive examination, and defense of thesis.

Master of Musicology

The master of music degree in musicology has two emphases: historical musicology or ethnomusicology.

Historical Musicology

Two (2) semester hours in music bibliography; three (3) semester hours in introduction to historical musicology; three (3) semester hours in seminar in historical musicology; twelve (12) semester hours in world music cultures and music history period courses; three (3) semester hours in ensembles; three (3) semester hours in introduction to ethnomusicology; three (3) semester hours in music in the United States; three (3) semester hours in music theory; and six (6) semester hours in thesis.

Ethnomusicology

Three (3) semester hours in introduction to ethnomusicology; three (3) semester hours in seminar in ethnomusicology; three (3) semester hours in seminar in field and laboratory techniques in ethnomusicology; three (3) semester hours in music in the United States; three (3) semester hours in introduction to historical musicology; two (2) semester hours in music bibliography; three (3) semester hours in an elective anthropology course (approved by the student's adviser); six (6) semester hours in thesis; three (3) semester hours in world music ensembles; and six to nine (6–9) semester hours in world music 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).

Candidates must place at the MV–(B, K, P, S, V, or W) 5351–5356 level in the applied music principal series.

Master of Opera Production

Coaching Emphasis

Nine (9) semester hours in applied music; two (2) semester hours in opera coaching; four (4) semester hours in opera literature; two (2) semester hours in vocal/instrumental accompanying; three (3) semester hours of an opera coaching project; two (2) semester hours of music bibliography; two (2) semester hours of advanced conducting; six (6) semester hours of music history and theory; and six (6) semester hours of electives.

Directing Emphasis

Fourteen (14) semester hours in opera courses, including opera production, opera directing, and seminar in opera literature; two (2) semester hours in applied music; two (2) semester hours in music bibliography; six (6) semester hours in music history and music theory; nine (9) semester hours in music and nonmusic electives (suggested courses include theatre, dance, art, arts administration, business, or languages); and three (3) semester hours in an opera directing project.

Performance Emphasis

Twleve (12) semester hours in applied music; twelve (12) semester hours in opera, including two performance roles; two (2) semester hours in music bibliography; six (6) semester hours in music history and theory; six (6) semester hours in electives (the areas of theatre, dance, art, languages, or music are recommended); an additional performance; and a demonstration of competence in Italian, French, and German are also required.

Master of Music Therapy

The graduate degree in music therapy requires a minimum of eighteen (18) 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 (30) semester hours of approved graduate course work 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 (36) semester hours of approved graduate course work with an acceptable GPA and successful completion of graduate clinical practicum and master's comprehensive examination.

Master of Music Education

Sixteen (16) semester hours in music education, including seminar and thesis; six (6) semester hours in music theory and music history; two (2) semester hours in music bibliography or an appropriate substitute; two (2) semester hours in applied music; and six (6) semester hours in a nonmusic subject area.

A candidate for the master of music education degree, with the approval of the graduate music education committee, may elect a nonthesis plan which requires a minimum of thirty-six (36) semester hours of course work, including a three (3) hour directed individual study project under the direction of the major professor.

The Doctor of Philosophy 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 (70) semester hours beyond the baccalaureate degree (forty [40] semester hours beyond the master's degree) is the minimum requirement for graduation, excluding credit earned in dissertation. At least twenty (20) semester hours beyond the baccalaureate degree must be in music education. Nine (9) 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 (70) semester hours beyond the baccalaureate degree (forty [40] semester hours beyond the master's degree) as the minimum requirement for graduation, excluding credit earned in dissertation. At least thirty (30) semester hours beyond the baccalaureate degree must be in music therapy and music education. Nine (9) 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 l) 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 with a Specialization in Music Theory

Offered to applicants who demonstrate superior musicianship and scholarship. In addition to the admission requirements, acceptance to the program is based on: l) 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 (70) semester hours beyond the baccalaureate degree (forty [40] semester hours beyond the master's degree), excluding credit earned in dissertation, is required. This will include six (6) semester hours in a doctoral seminar in music theory, three (3) semester hours in advanced Schenkerian analysis, three (3) semester hours in an advanced musicology or music education seminar, twenty-two (22) semester hours in music or nonmusic electives, and six (6) 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.

Music with a Specialization in 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 (70) semester hours beyond the baccalaureate degree (forty [40] semester hours beyond the master's degree), excluding credit earned in dissertation, is required. This will include twelve (12) 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 Education Degree

Music Education

Offered to candidates who pursue the course of study with distinction and show promise as outstanding administrators or master teachers of music.

Seventy (70) semester hours beyond the baccalaureate degree (forty [40] semester hours beyond the master's degree) is the minimum requirement for graduation, excluding credit earned in dissertation. At least twenty (20) semester hours beyond the baccalaureate degree must be in music education. Nine (9) semester hours each must be taken in two of the following areas: musicology, theory, education, psychology, composition, performance, or related fields.

The Doctor of Music 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 (70) semester hours beyond the baccalaureate degree (forty [40] 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 (12) semester hours in composition; six (6) semester hours in writing skills (16th-century counterpoint and fugue); two (2) semester hours of conducting; and twenty (20) 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 (70) semester hours beyond the baccalaureate degree, forty (40) semester hours beyond the master's degree, is the minimum requirement, excluding a minimum of twenty-four (24) 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 (70) semester hours beyond the baccalaureate degree (forty [40] 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 (30) semester hours will be in the field of major concentration, including ensemble.

2. Of the remaining forty (40) semester hours, one area of not fewer than eight (8) semester hours is required in music history or music theory/composition; two (2) semester hours in music bibliography; and thirty (30) semester hours of electives, of which at least twenty-two (22) semester hours must be in music electives.

Piano Performance Majors (Accompanying/Chamber Music Emphasis)

1. Thirty (30) 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 (40) semester hours, one area of not fewer than eight (8) semester hours is required in music history or music theory/composition; two (2) hours in music bibliography; twelve (12) hours in vocal and chamber music literature; and eighteen (18) hours in electives, of which at least twelve (12) hours must be in music electives.

Voice Performance Majors (General Emphasis)

1. Thirty (30) semester hours will be in the field of major concentration, including recital and repertoire coaching, and ensemble.

2. Of the remaining forty (40) semester hours, one area of not fewer than eight (8) semester hours is required in music history or music theory/composition; two (2) semester hours in music bibliography; and thirty (30) semester hours of electives, of which at least twenty-two (22) semester hours must be in music electives.

Voice Performance Majors (Choral Conducting Emphasis)

1. Thirty (30) semester hours will be in the field of major concentration, including applied voice, coaching, choral conducting and techniques, and ensemble.

2. Of the remaining forty (40) semester hours, one area of not fewer than eight (8) semester hours is required in music history or music theory/composition; two (2) semester hours in music bibliography; and thirty (30) semester hours of electives, of which at least twenty-two (22) semester hours must be in music electives.

Voice Performance Majors (Opera Performance Emphasis)

1. Thirty (30) semester hours will be in the field of major concentration, including opera workshop and opera coaching.

2. Of the remaining forty (40) semester hours, one area of not fewer than eight (8) semester hours is required in music history or music theory/composition; two (2) semester hours in music bibliography; and thirty (30) semester hours of electives, of which at least twenty-two (22) semester hours must be in music electives.

Voice Performance Majors (Pedagogy Emphasis)

1. Thirty (30) semester hours will be in the field of major concentration, including applied voice, vocal pedagogy, and recital and repertoire coaching.

2. Of the remaining forty (40) semester hours, one area of not fewer than eight (8) semester hours is required in music history or music theory/composition; two (2) semester hours in music bibliography; three (3) semester hours of behavior modification; and twenty-seven (27) semester hours of electives, of which at least nineteen (19) semester hours must be in music electives.

Flute, Oboe, Clarinet, Bassoon, Saxophone, Trumpet, Horn, Trombone, Tuba, or Percussion Majors

1. Thirty (30) semester hours will be in the field of major concentration, including ensemble, and including not less than six (6) semester hours in wind and percussion pedagogy and wind and percussion literature.

2. Of the remaining forty (40) semester hours, one area of not fewer than eight (8) semester hours is required in music history or music theory/composition; two (2) semester hours in music bibliography; and thirty (30) semester hours of electives, of which at least twenty-two (22) semester hours must be in music electives.

Organ

1. Thirty (30) 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 (40) semester hours, eight (8) semester hours are required in music history, music theory, and/or composition; two (2) semester hours in music bibliography; and thirty (30) semester hours of electives, of which at least twenty-two (22) 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, one lecture recital/project, and the research treatise. 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.

Certificate in Performance

The Certificate in Performance is designed for the advanced performer with exceptional potential for a performance career. Applicants must have completed a master's degree in performance and be able to demonstrate performance ability comparable to the technical and musical proficiency of a young professional performer.

In addition to an audition (see audition requirements below), a complete application for the arist certificate program will include submission of both the Florida State University and School of Music applications and a repertoire list, representative programs, performance reviews, and other materials that will demonstrate evidence of experience and knowledge of repertoire.

Opera

The Certificate in Performance with an emphasis in opera requires sixteen (16) semester hours in applied music; six (6) semester hours in opera coaching; four (4) semester hours in opera literature; four (4) semester hours of opera workshop; a minimum of two opera roles (four [4] semester hours); the choice of either a third opera role or a solo recital (two [2] semester hours); a Graduate Project (two [2] semester hours); and four (4) semester hours of music or non-music electives (suggested courses include costume history, opera production, opera directing, history, theory, dance, theatre and language.)

Strings (Violin, Viola, Violoncello)

The Certificate in Performance with an emphasis in strings requires sixteen (16) semester hours in applied music; ten (10) semester hours of supporting courses (e.g., chamber literature, ensembles, performance practice seminar); two solo recitals and one chamber recital (six [6] semester hours); and ten (10) semester hours of electives.

Piano

The Certificate in Performance with an emphasis in piano requires sixteen (16) semester hours in applied music; twelve (12) semester hours of supporting course (e.g., solo music literature, early keyboard literature, duo piano, chamber music, performance practice seminar); two solo recitals and one chamber recital (six [6] semester hours); and eight (8) semester hours of electives.

SCHOOL OF NURSING

Dean: Katherine P. Mason

The Florida State University master of science program in nursing (MSN) offers a dual emphasis graduate curriculum with both clinical specialization and role development tracks. The program may be completed in four to five semesters of full-time study or may be pursued on a part-time basis. The master's nursing program has received full accreditation by the National League for Nursing.

Master's of Nursing—Programs of Study

The following programs of study are offered:

Family and Adult in the roles of nurse practitioner, clinical nurse specialist, nurse educator, and clinical specialist case manager. The **post master's programs** offer focused studies in nurse practitioner, clinical specialist, case manager, and nurse educator roles.

Facilities

Academic Resources. The School of Nursing has varied and abundant resources to support graduate study. The **Learning Resource Center (LRC)** on the third floor of the school has journals, reference texts, and other media such as films, tapes, and slides available for graduate study.

The **Computer Lab** on the fourth floor has a variety of computers for graduate student use. Software and hardware are available for use. Also, graduate students are allotted funds for computer use related to the production of their thesis research projects. Literature reviews can be facilitated through a variety of computer-based searches.

The **Nursing Technology Lab (NTL)** 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 units, indigent care clinics, private physicians offices, health maintenance organizations, walk-in clinics, state-level health agencies, case-managed organizations, and educational facilities are used for clinical experience. Students have input into the selection of sites for clinical experience to meet their specific learning needs and practice interests.

Opportunities

Upon graduation from the program, the student receives a master of science in nursing degree or a master in nursing degree (non-thesis option) which allows nursing practice in specialized areas with advanced practice. Graduates in the role areas of family or adult nurse practitioner and clinical nurse specialist may apply for licensure as an Advanced Registered Nurse Practitioner (ARNP) in the state of Florida.

American Nursing Association (ANA) certification in the specialty areas may also be sought upon graduation as well as other national certification organizations for specialties. Employment opportunities in advanced nursing practice within case manager, nurse educator, clinical nurse specialist, and adult/family nurse practitioner roles are available for the graduate. There is a great need for nurse educators and nurse case managers and opportunities abound.

Scholarships/Awards

Financial assistance in the form of assistantships, scholarships, traineeships, and loans is available for qualified students through the School of Nursing or the University financial aid office.

Federal nurse traineeships are awarded by the graduate committee of the School of Nursing for full-time study. The graduate committee also awards the University graduate teaching or research assistantship funds allocated to the school each year. Applications for financial assistance are considered each semester.

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 for Nursing;
2. A minimum score of 1000 on the Graduate Record Examinations (GRE);
3. A grade point average (GPA) of 3.0 (on a 4.0 scale) in upper-division course work in the baccalaureate nursing program;
4. Current licensure as a registered nurse in Florida;
5. One year of employment as a baccalaureate registered nurse prior to clinical courses is preferred;
6. Three letters recommending the applicant for graduate study;
7. Evidence of health assessment skills through successful completion of either formal graduate course work or challenging exams;
8. Successful completion of a graduate-level course in inferential statistics prior to graduate research course;
9. Written statement of professional educational goals; and
10. Evidence of current malpractice 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 School of Nursing before admission. Applicants will be provided with fingerprint cards and waiver forms at the time they apply to the School 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 School 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 School 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 continually assess each student's professional performance. All School 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

School 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 School 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 "B–" (2.75 quality points) or below may count toward any graduate degree in the School of Nursing.

Students in the graduate program are required to maintain a 3.0 grade point average in all nursing course work 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 School 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. As part of the reinstatement process the student will be expected to meet with the School of Nursing graduate admissions committee to provide justification for a reinstatement decision; 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

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, 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, Marian Irish Professor in Political Science, William G. and Budd Bell Professor of Urban and Regional Planning, University Distinguished Research Professor, and numerous university teaching and advising award winners.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, 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 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 Pepper Center; The Florida Public Affairs Center; and interdisciplinary programs in Aging Studies, Asian Studies, African-American Studies, Environmental Studies, Social Sciences, International Affairs, Law and Society, Russian and East-European Studies, and Health Policy Research.

The college offers programs leading to the master's degree in 12 fields, the doctor of philosophy degree in six fields, and six graduate certificates.

Master's Programs

Aging studies

Asian studies

Demography

Economics

Geography

Health policy research

International affairs

Political science

Public administration (master of public administration)

Russian and East European studies

Social science (interdisciplinary)

Sociology

Urban and regional planning (master of science in planning)

Doctoral Programs

Economics

Geography

Political science

Public administration and policy

Sociology

Urban and regional planning

Dual-degree programs

Dual-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/master of 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 public administration (MPA) and master of science in criminology (MSC)

Master of public administration (MPA) and master of social work (MSW)

Master of public administration (MPA) and master of science in health policy research (MS)

Graduate Certificates

Graduate certificates are offered in the following disciplines:

Aging

Emergency management

Health services administration and policy

Human resource management

Public administration and policy

Public financial management

The graduate programs in the college produce competent and up-to-date professionals for employment in the public and private sectors. 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.

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, not all programs offer the master's degree, and the requirements for the master of public administration, the master of science in planning and the master of science in political science degrees exceed the University minima. Some programs require a master's thesis of all candidates, others do not. Entry to dual-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 that the doctoral dissertation will require at least two semesters of full-time effort to prepare. Graduate students registering for disserta-

tion hours only are normally expected to register for twelve (12) 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 (9) semester hours of dissertation credit for at least three semesters. A minimum of twenty-four (24) 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 (30) semester hours of graduate credit, a doctoral student must receive from The Florida State University a minimum of twenty-four (24) semester hours of graduate credit within a 12-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*: Pepper Institute on Aging and Public Policy, Institute for Health and Human Services Research, Economic Policy and Government, and Reubin O' D. Askew School of Public Administration and Policy.

Assistantships and Fellowships

Most of the college's departments have large undergraduate teaching programs, and the departments, institutes, centers, and programs engage in substantial outside-funded research and contract work. Accordingly, many graduate students are appointed as teaching or research assistants. 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 (12) 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 (20) 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. College teaching fellowships may involve up to 10 hours of duties per week, but include waivers of matriculation and out-of-state tuition. 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.

In addition to having access to the University's mainframe computing facilities, the college maintains the Social Science Data Center with a microcomputing lab with PCs and printers, a geographic information systems laboratory, a software library, and a large data archive relevant to the social sciences. The college houses a survey research laboratory with design, survey, and analytic capability including telephone survey. Most departments also have PCs and software available for use by their graduate students. The Center for Demography and Population Health has a specialist library.

The college operates the Bellamy Copy Center with both high-volume and self-service modern photocopy equipment available for use at cost. 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 dual-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 dual-degree programs with the Department of Urban and Regional Planning, the School of Criminology and Criminal Justice, the School of Social Work, and the health policy research degree, in which the student simultaneously pursues the degrees of MPA and MSP, MPA and MSC, MPA and MSW, or MPA and MS. These programs enable the student to complete both degrees in less time than if they were attempted sequentially. To enter a dual-degree program, the student must be formally admitted to both programs.

Much of the college's work emphasizes international activities and linkages. Through the master's internationalist program students may earn a master's degree in urban and regional planning and secure placement in the Peace Corps to provide urban planning assistance in developing nations. The college, through the Florida–Costa Rica Institute, has a linkage arrangement with the University of Costa Rica and the Republic of Panama branch. Faculty frequently teach at the Florida State University London Study Center and the Florence Study Center. Although these are primarily undergraduate instruction programs, it is possible for graduate students to be attached to them. Over 10 percent of the college's graduate students are international, from a wide range of countries, and most years there are visiting international faculty members.

SCHOOL OF SOCIAL WORK

Dean: Bruce Thyer; *Associate Dean:* Thomas Edward Smith; *Assistant Dean:* Pamela W. Graham

The social work program at The Florida State University has its origins in the early history of the institution. Social welfare content was first introduced into the curriculum in the 1920s. By the mid-1930s, during the Great Depression, undergraduate courses in casework and group work were offered, as well as field placements at the Leon County Welfare Association and the Leon County Unemployment Relief Council.

In 1947, the year that the Florida State College for Women was named The Florida State University, the graduate program in social work accepted the first class of students. Two years later the master of social work (MSW) program was accredited by the Council on Social Work Education (of which it is a charter member) and has earned reaccreditation continuously since that time.

The doctoral program in social work was approved by the Board of Regents in 1974 and accepted its first student in the fall of that year. In June of 1973, as part of an overall University structural reorganization, the social work program became identified as the School of Social Work and is now one of 22 schools in the world which offer social work degrees at the baccalaureate, master's, and doctoral levels.

As the profession of social work prepares for the 21st century, there is an ever-increasing awareness of the impact of the many social changes that have taken place in our contemporary world. The School of Social Work is dedicated to the preparation of tomorrows social workers. The school's curriculum is continually updated, recognizing and responding to the changing demands made on the profession. The curriculum is rooted in the ecosystems perspective which serves as an organizing framework for the entire program, thereby providing an effective basis for studying people and their environment. The combination of class and fieldwork provides students with a rich educational experience and the opportunity for the integration of theory and practice.

The mission of the School of Social Work is highly compatible with the mission and goals of the larger University in its efforts to create and maintain an environment in which scholarship and service support excellence in teaching. With its nationally prominent faculty, the School of Social Work has acquired recognition as one of the most respected schools in the country. Many of the program's graduates have assumed positions of leadership across the country in a wide range of professional areas.

Master of Social Work Degree Program

MSW Program Director: Pamela W. Graham

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.

Master of Social Work

The master of social work degree program is designed to enable students to develop professional competence by providing a curriculum that includes social work practice, social policy, knowledge of human behavior and the social environment, research knowledge and experience, and field instruction.

The curriculum has been developed to emphasize the common elements in all social work practice areas so that persons receiving this professional degree will be able to practice in a variety of agencies and settings.

At the master's level, students may concentrate in clinical social work or social policy and administration. Students who complete the clinical social work concentration meet the academic requirements for licensure as a clinical social worker.

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 (61) semester hours, including thirty-nine (39) semester hours of on-campus instruction and twenty-two (22) semester hours of field instruction. Some specializations may require summer attendance between the first and second years.

Advanced Standing

The school 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 (39) semester hours including twelve (12) semester hours of field instruction. The student chooses to specialize in either social policy and administration or clinical social work.

All students must meet the school's statistics requirement. See the *MSW Bulletin* available from the school for details.

Part-Time/Off-Campus/On-Line Programs

Time-extended programs leading to the master of social work degree are offered at intervals on the main campus and off-campus sites in Gainesville, Jacksonville, Panama City, and Pensacola as well as on-line. 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 July 1st of the year in which admission is planned and must be made both through the graduate student affairs office in the School of Social Work and through graduate admissions at The Florida State University. Applications for advanced standing students are to be completed by November 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 or a minimum score of 1000 on the combined verbal and quantitative portions of the aptitude test of the Graduate Record Examinations (GRE).

Note: in addition to a liberal arts foundation, each applicant must have completed one course in each of the following areas: human biology, psychology, sociology, economics, and American government or political science. A statistics course is required if one has not been taken within seven years prior to admission.

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://ssw.fsu.edu.*

Transfer Students

A limited number of students who have completed a full year of graduate study in an accredited school of social work may be admitted to the second year of graduate study which begins with the Fall semester of one year and is completed in the

Spring of the following year. Applications should be completed before July 1st of the year in which admission is requested. Work completed more than three years before the date of admission cannot be credited toward the master of social work degree.

Grade Requirements

The School 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 instruction course. Continuation in the program with less than a 3.0 GPA will require the approval of the Dean of the School of Social Work. Students may not be in a field placement with an "I" or "NG" on their graduate record.

Doctor of Philosophy in Social Work Degree Program

PhD Program Director: Wendy P. Crook

In conjunction with the school's mission, the PhD program is committed to the advancement of the social work profession through contributions to the social policy and direct practice knowledge base and to social work education. The program also has a service mission, whereby students and faculty are dedicated to participation in the local, state, and larger communities. Ultimately, the goals of the PhD program are to improve: 1) the quality and effectiveness of both direct and indirect social work practice; 2) the quality of social work education; and 3) the social welfare of society in general.

Doctoral students must demonstrate competency in four areas of study: 1) direct practice; 2) social policy; 3) research methodology and theory/knowledge development; and 4) a specialization area of the student's choice. The school offers two options at the PhD level—direct practice and social policy.

Admission

Admission to the doctoral program as a full- or part-time student requires graduation from the master's degree program of a school of social work accredited by the Council on Social Work Education, plus a score on the GRE of at least 1000 with neither quantitative nor qualitative score falling below 400, and a GPA of at least 3.0 on a four-point scale for the last two years of undergraduate work.

Each candidate for admission must 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 school 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 may enter the program in either semester of the academic year.

For further information, interested persons are advised to request materials and application forms from: *Director of the Social Work Doctoral Program, School of Social Work, The Florida State University, Tallahassee, FL 32306-2750.*

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 are optional.

The University's minimum residency requirements must be met. A written 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

Certificate Program in Family Social Work Practice

This certificate program is designed for MSW clinical concentration students who wish to develop advanced competence in couple and family treatment. The program affords an opportunity for eligible students to develop a specialization area beyond the rigorous demands of the clinical concentration. A specialty in family social work practice requires a total of sixty-nine (69) semester hours for the two-year student (nine [9] additional semester hours beyond the normal sixty-one (61) hours) and forty-eight (48) semester hours for the advanced-standing student (nine [9] semester hours beyond the thirty-nine [39] required hours).

Certificate in Aging Studies

Students who are either enrolled in an undergraduate, graduate, or advanced degree program or individuals with a baccalaureate degree enrolled as special students at the University may apply for the Certificate Program in Aging Studies. The certificate is administered and awarded by the Pepper Institute on Aging on behalf of The Florida State University. The School of Social Work provides course work which partially meets requirements for awarding of the certificate. Additional information can be obtained from the Pepper Institute on Aging and Public Policy at *http://www.pepperinstitute.org.*

The Arts and Community Practice Certificate Program

This interdisciplinary certificate program is designed for undergraduate and graduate students who wish to develop a focused concentration in 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. This is offered in conjunction with the Department of Art Education and the Department of Dance.

Certificate Program in Child Welfare Practice

This certificate is designed for undergraduate and graduate students who wish to develop focused skills in the area of child welfare. Particular attention is paid to the needs of children and families who interact with the child welfare system and the impact on mental health. The school is part of a state-wide partnership with the Florida Department of Children and Families to increase the number of social work professionals working in child welfare and improve services to this population. For further information, please refer to *http://ssw.fsu.edu/childwelfare.*

Dual-Degree Program in Social Work and Public Administration

This dual-degree program is designed to better prepare students for overlapping careers in social work and management. Recognizing that many positions in private, public, and nonprofit sector human service organizations require social work and management knowledge, the program permits the mastery of both bodies of professional knowledge and skills in approximately three years through elimination of duplicative course work. This is one of a very few dual-degree programs nationwide in social work and public administration.

Interdisciplinary Graduate Minor in Dispute Resolution

This minor provides an opportunity for students to develop expertise in dispute resolution in conjunction with a variety of graduate programs in several schools and colleges at The Florida State University.

Dual-Degree Program in Social Work and Law

This program, the only one in the Southeast, offers students the opportunity to gain skills and knowledge in both law and social work, preparing them to pursue a career in a specific field of interest such as family law, child welfare or domestic violence. Students must be simultaneously admitted to the College of Law and the School of Social Work.

Institute for Family Violence Studies

The endowed Institute for Family Violence has been established within the School of Social Work to examine the effects of family violence across the life span for a wide range of populations. Recognizing the legacy of violence on the subsequent development of victim survivors, the institute is concerned with the contextual and developmental aspects of family violence. The institute maintains the ecological perspective of social work supporting analyses of societal institutions, policies, and practices that impact the incidence of interpersonal violence and trauma.

Trinity Institute for the Addictions

The endowed Trinity Institute for the Addictions will establish a state-of-the-art program for the study of addictions. The multifaceted program is focused on every kind of addiction and makes use of all academic disciplines that illuminate the causes, prevention, and treatment of addictions. The use of technology to make information available globally is an additional component of the program, as is the establishment of an Eminent Chair in Addictions.

Field Instruction

Field instruction is a vital and integral part of the total curriculum. Through actual experience in the field, students are helped to link theory to practice. Qualified agency staff members serve as field instructors, and the field agencies selected by the school cover the broad spectrum of social work practice. Currently, the school is affiliated with more than 400 agencies across the state of Florida, the southeastern United States and internationally.

Continuing Education

The program of continuing education at the School of Social Work is committed to excellence in professional development for graduate practitioners. The goal of the continuing education program 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 School of Social Work.

The continuing education 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.

Financial Assistance, Scholarships, and Awards

The School of Social Work makes every effort to assist well-qualified students in obtaining financial assistance. The school administers a select number of stipends, fellowships, and traineeships on the basis of merit and financial need. Student assistantships are also available based on the skills, financial need, and level of scholarship of the applicant. Application forms for financial assistance may be obtained by writing to the graduate student affairs office in the School of Social Work. Prospective students should also contact the University's Office of Financial Aid for information about loans, grants, work-study opportunities, and scholarships.

Mark DeGraff and Lula Hamilton DeGraff Scholarship. This scholarship is awarded to a full-time senior undergraduate, or a full or part-time graduate (MSW or PhD) student who is interested in working with youth and their problems, or intends to conduct research related to factors which influence the growth and development of youth. A letter requesting consideration must be submitted. The written statement's clarity is a consideration.

Joanna F. Gorman Scholarship. Full-time upper-level undergraduate or graduate students (MSW or PhD) may apply for this scholarship. A statement must be submitted summarizing knowledge of, and interest in, one of the following fields: child welfare, maternal and child health, community mental health, or primary prevention in health or mental health. An agreement to take two specialized courses and an internship in the specialization area selected should be included, as well as an intent to work at least one year in the chosen field following graduation. A transcript (unofficial accepted) and two (2) letters of reference which attest to student's academic achievements, good character, and community service, also must be attached.

Robert P. Hurrle Scholarship for Field Instruction. This is a field scholarship for an undergraduate or MSW student who demonstrates a commitment to practicing social work in either the field of aging or on a military installation, and who also will be completing a field practicum in one of these areas. A statement outlining work or volunteer experience must be submitted, along with course work (if any) taken in the field of aging, financial need, and career goals in aging or military social work. The student should specify which semester field placement will begin.

Margaret H. Jacks Scholarship in Aging. This scholarship is presented to a full- or part-time MSW student in good academic standing. The student must have completed one course on aging or demonstrated a commitment to the field of aging. Students must submit a transcript, a statement of need, a written commitment to field of aging, and list of volunteer or work experiences.

Richard M. King Scholarship in Social Work and Business Administration. Any graduate student who is interested in earning both an MSW and a MBA may apply for this scholarship. Individuals who have previously earned an MSW or MBA still may qualify for this scholarship provided the intent is to pursue the additional degree at The Florida State University. Students should submit a statement outlining eligibility and intent.

Koalska Undergraduate Scholarship. Full-time undergraduate students who demonstrate financial need, and whose parents did not attend college, are eligible for this scholarship. A written statement of eligibility must be submitted.

Joyce Harper Laidlaw Scholarship in Child Welfare. MSW or PhD students who demonstrate dedication and commitment to work in the area of child welfare, and also show financial need are eligible for this scholarship.

Coyle and Mabel Moore Scholarship. This scholarship is awarded to a full-time BSW, MSW, or PhD student. Students should submit a statement showing evidence of good character, citizenship, volunteer work, and financial need.

Sarah Sealey Morrill Scholarship. For a BSW, MSW, or PhD student. Submit a statement of interest in the field of community mental health.

MSW Class of '75 March Graduates Scholarship. For two-year full-time MSW student interested in community-based practice, advocacy or public policy. Students should submit a statement of interest, including specific evidence of commitment to social justice concerns and attach a transcript (unofficial accepted).

Bernhard Scher Undergraduate Scholarship. This scholarship is available to undergraduate (sixty [60] semester hours completed at college level) social work majors enrolled in social work classes, with an overall GPA of at least 3.5. Submit an essay emphasizing "Social Work Values" not to exceed 1500 words, with a transcript attached (unofficial accepted.)

Guy and Delores Spearman Scholarship. This award is presented to a MSW student from Brevard County with overall GPA of 3.0 or greater. Submit a letter verifying eligibility, with a brief statement of career goals.

Victoria E. Warner Scholarship. This scholarship is available to a MSW student (full or part-time) who is a graduate of Florida A & M University. Submit a written statement of need, and statement of career plans relative to working within the African-American community.

SCHOOL OF THEATRE

Dean: Steven Wallace; *Associate Deans:* Bill Byrnes, T. Lynn Hogan

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 The 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 community, 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 uses four theatres to train future theatre artists. The **Richard Fallon Theatre**, a 500-seat proscenium stage, hosts the school's Mainstage subscription series of classics, musicals, and contemporary plays for the community and student body. The **Studio Theatre**, a 183-seat proscenium stage, offers graduate directors, designers, and technicians an opportunity to produce fully-mounted productions as part of their degree requirements. **The Lab**, an intimate thrust stage of approximately 150 seats, is used for experimental works. The **Fine Arts Annex** is a classroom/rehearsal space that doubles as a performance venue for the numerous independent student-produced works sponsored by the School of Theatre Student Advisory Council.

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 program in acting is operated in conjunction with the Asolo Theatre Company, a leading LORT professional theatre. The conservatory and the Asolo Theatre Company are both housed in a beautiful state-of-the-art 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 London Theatre Experience, an extraordinary, full-semester 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 either acting, directing, scene design, costume design, lighting 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. Two 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. The Free Works Theatre is operated by the Student Advisory Council as a venue for student productions.

Master of Arts/Master of Science

The master of arts/master of science (MA/MS) program in theatre at The 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. However, either the MA or the MS is appropriate for any type of student, since both programs can be designed to meet specific needs. Both the MA and the MS provide the option of writing a thesis; the only formal difference between the two programs is that the MA requires a demonstration of proficiency in a foreign language, while the MS does not.

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 Di-

rector of Graduate Theatre Studies, and the Associate Dean for Academic and Students Services of the School of Theatre.

Master of Fine Arts Requirements

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 (60) 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 towards the MFA at The Florida State University is the practicum program. Practicum acknowledges the legitimacy of unique artistic production-oriented work not affiliated with classroom course work. The practicum program allows students and their advisors to plan and execute an individualized track to meet students' particular needs and desires. The specific content of each practicum is determined in advance and entered on the student's progress check list. This contractual agreement is evaluated by the MFA faculty each semester.

Review

A faculty committee meets with each student every regular semester to evaluate the student's progress. Individual program advisors report on their students in terms of attitude, class work, production assignments, projects, artistic growth, conduct, and professional potential. Any faculty members who have worked with MFA students may submit relevant information. The results of the review are part of the student's file.

Internship

Internships provide students with the opportunity to gain experience in their particular field by working under the supervision of recognized professionals. Resident internships must be arranged with the student's program director. The student is responsible for providing progress reports and a full evaluation from the internship supervisor before grades can be assigned. Internships may be arranged to a maximum of thirty (30) 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. During the three years students direct two fully-mounted productions and a variety of other projects. Each MFA director must direct a workshop production of a one-act play, a non-thesis production of a full-length play, and a fully-mounted production of a second full-length play. The plays are chosen in consultation with the head of the program and school's artistic advisory committee to provide contrast in genre and in style. The final production of a full-length play constitutes the MFA director's thesis production and is evaluated by a faculty jury chosen by the student and the head of the program. Only a limited number of students are accepted to ensure close personal attention and to provide sufficient production experience for each student.

Specialization in Scene Design

The mission of the scene design program is to provide students with the necessary training and experience needed to enter the professional design field. The program is designed to cultivate the skills and talents of our students and give them a strong foundation for their future growth as designers and artists in theatre, film and television. Students graduate with a detailed knowledge of all aspects of the scenic design process. Artisan skills such as drafting, model construction, scene painting, and computer drafting and rendering are explored. Each MFA scene design student will design at least three productions while at The Florida State University. Opportunities to teach within the School of Theatre are available.

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 Lighting Design

The mission of the program is to train students in the art and craft of lighting design for theatre, opera, dance, and other aspects of the entertainment business. The program is designed to give students skills that will enhance their growth as artists through a combination of studio classes, one-on-one mentoring, and practicum assignments. Students will have the opportunity to work in all phases of the production process. Traditional design practices are combined with new technology and innovations to give the student the best preparation possible for the professional world. Emphasis is placed on presentation, communication, and collaborative skills. Each student will have the opportunity to design numerous productions while attending The Florida State University. Opportunities to teach within the School of Theatre also are available for qualified students.

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 woodworking, and motion control will be covered in detail. Structural analysis and design for the stage is emphasized. Each MFA technical production candidate will have technical direction or assistant technical direction responsibilities for at least three productions. Teaching opportunities also are available.

Specialization in Theatre Management

The mission of the theatre management program is to help enhance the professional management of theatre and arts organizations in America by developing future theatre managers. Students are provided with practical training and hands-on experience in the process and practice of managing theatre and arts organizations. Our goal is to give students an in-depth knowledge of all aspects of producing theatre, as well as an understanding of

management principles, personnel, finance, marketing and fundraising management and working knowledge of computer applications in arts management.

Doctor of Philosophy

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 course work
- 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 course work, 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 [24] semester hours within any 12-month period once a student has reached thirty [30] graduate semester hours or a master's degree.)

The doctoral curriculum requires seventy (70) semester hours beyond the masters degree (forty-six [46] semester hours of course work and at least twenty-four [24] dissertation hours.) For students on assistantship, nine (9) hours per semester constitutes a full-time load. Students who are not funded and those on fellowship must register for twelve (12) 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.

SCHOOL OF VISUAL ARTS AND DANCE

Dean: Sally McRorie

The School of Visual Arts and Dance is relatively young in the history of the University. Founded in 1973, the school has existed largely as presently constituted since 1978 when the Department of Dance joined the other components of the school: the Department of Art, the Department of Art History, the Department of Art Education, the Department of Interior Design, and The Florida State University Museum of Fine Arts. In 1990 the school assumed administration of the Appleton Museum of Art. The academic entities offer an extensive program of instruction in all areas of the visual arts and dance, which are fully accredited by the National Association of Schools of Art and Design (NASAD) and the National Association of Schools of Dance (NASD). Appropriate programs are also accredited by the Foundation for Interior Design Education Research (FIDER) and the National College Association for Teacher Education (NCATE). In fact, every level of undergraduate and graduate degree that a school of fine arts can offer in these areas is represented within the school, including the established terminal degree in each discipline. Accordingly, the school is unique in the state of Florida.

Enhancement of the fine and performing arts is one of the University's specific goals as presented in its mission statement. The comprehensive nature and consistent quality of the school may be credited in large part to the recognition and support of the arts 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. Students of the school 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.

For its part, the school promotes the visual arts and dance within this community. It functions to enrich the lives of students, to provide them with the means of self-expression in an increasingly complex and impersonal technological society, and to make them visually literate in a world that requires the visualization of ideas and concepts. In short, the study and practice of art are 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 school to keep the spirit of open inquiry vital and productive.

Regardless of the department of a student's major, the School of Visual Arts and Dance provides an unusual opportunity for working with a distinguished graduate faculty of recognized artists and scholars. The quality of the faculty is clear from an impressive list of national and international distinctions, awards, offices held, exhibition and performance records, and publications; but the true benefit to graduate students is the commitment to teaching and tutorial attention which characterizes the faculty.

Facilities

In addition to the lecture rooms, general classrooms, seminar rooms, and media-specific laboratories (e.g., printmaking, painting, drawing, ceramics, sculpture, photography, computer imaging, etc.), two specialized facilities merit particular mention. First, art students in the master of fine arts (MFA) program are provided individual studios in a large "warehouse" at the edge of campus, 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. Secondly, dance students train in spacious, comfortable studios and perform in their own Dance Theatre, a fully equipped professional facility located in the same building as their major classes. It is in this theatre that MFA candidates produce and perform their graduate concerts.

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 school. 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.

The Appleton Museum and Collection

The latest complement to the academic and cultural components of the University administered by the school is the Appleton Museum and Collection. Located approximately three hours' drive away in Ocala, Florida, this beautiful museum was constructed in 1987 to house the extensive collection of the donor, Arthur I. Appleton. Works of art bridging many cultures over thousands of years form the core of the school's outreach program in central Florida and provide rich source material for students of art and art history.

The John and Mable Ringling Museum of Art

Beginning with the new millenium, The Florida State University has been 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 museum, and Ringling mansion, offers multiple opportunities for students in the arts, museum studies, and the humanities. Programs are in the process of being defined which will derive from and enhance graduate education in the School of Visual Arts and Dance, as well as many other areas within The Florida State University.

Certificate Program in Museum Studies

The School of Visual Arts and Dance, along with the College of Arts and Sciences, the College of Education, the College of Human Sciences, and the School of Information Studies, 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, anthropology, classics, history, textiles and consumer sciences, sport management and 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

Of the many international centers operated by The Florida State Univerisity, those located in Florence, Italy, Valencia, Spain, and London, England, which are open to all qualified students in the State of Florida, Division of Colleges and Universities system, provide a special opportunity for a truly rewarding educational and cultural experience. Representing a collegial body of students of art, the School of Visual Arts and Dance has 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 school faculty has taught in Florence,

and the school has significant representation among the graduate students studying there. Students of art, dance, design, and art history flourish in the rich, humanistic environment of this magnificent city and cultural center. This they can do usually without disrupting their sequence of courses and without loss of residency, since the Florence campus is a true extension of the Tallahassee campus. A similar opportunity is available on the London campus, which has had increasing art history participation and offers enhanced opportunities for students in the museum studies area. Summer course work is also available in London and Florence. The Valencia programs are particularly strong in studio offerings, and build upon the great museums and galleries in the Valencia area of Spain.

Athanor

For the past 19 years the school has published *Athanor*, a well-respected art history journal which presents scholarly articles by graduate students from universities in the Southeast. The journal results in part from an art history graduate student symposium conducted on campus each spring. 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 School

By and large, the school has few requirements which go beyond those stipulated by the University. As appropriate, these are provided in the narratives describing the individual departments and programs. Two programs are categorized as "limited" access in the sense that they are proficiency based: the MFA in art (studio) and the MFA in dance. Entrance is gained through portfolio review or audition.

THE COMMON COURSE NUMBERING SYSTEM

Florida's Statewide Course Numbering System

Courses in this *Bulletin* are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System. This common numbering system is used by all public postsecondary institutions in Florida and by seventeen participating private institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions.

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 type of institution and discipline field or specialization. The course prefix and each digit in the course number have meaning in the Statewide Course Numbering System (SCNS). The list of course prefixes and numbers, along with their generic titles, is referred to as the "SCNS taxonomy." Descriptions of the content of courses are referred to as "course equivalency profiles."

Example of Course Identifier

Prefix	Level Code (first digit)	Century Digit (second digit)	Decade Digit (third digit)	Unit Digit (fourth digit)	Lab Code
SYG	1	0	1	0	
Sociology, General	Freshman level at this institution	Entry level general sociology	Survey course	Social problems	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 the participating regionally accredited postsecondary institutions that offer the course, with a few exceptions (Exceptions are listed below.) For example, a survey course in social problems is offered by 31 different postsecondary institutions. Each institution uses "SYG _010" to identify its social problems course. The level code is the first digit and represents the year in which students normally take this course at a specific institution. In the SCNS taxonomy, "SYG" means "Sociology, General," the century digit "0" represents "Entry-Level General Sociology," the decade digit "1" represents "Survey Course," and the unit digit "0" represents "Social Problems."

In science and 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, having the same prefix and course number without a lab indicator, which meets at a different time or place.

Transfer of any successfully completed course from one institution to another is guaranteed in cases where the course to be transferred is equivalent to one offered by the receiving institution. Equivalencies are established by the same prefix and last three digits and comparable faculty credentials at both institutions. For example, SYG 1010 is offered at a community college. The same course is offered at a state university as SYG 2010. A student who has successfully completed SYG 1010 at the community college is guaranteed to receive transfer credit for SYG 2010 at the state university if the student transfers. The student cannot be required to take SYG 2010 again since SYG 1010 is equivalent to SYG 2010. 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 native students. It is the prerogative of the receiving institution, however, to offer transfer credit for courses successfully completed which have not been designated as equivalent.

The Course Prefix

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or subcategory 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 used to identify the course.

Authority for Acceptance of Equivalent Courses

Section 1007.24(7), Florida Statutes, reads: "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

The following courses are exceptions to the general rule for course equivalencies and may not be transferable. Transferability is at the discretion of the receiving institution:

1. Courses in the _900 –_999 series (e.g., ART 2905);
2. Internships, practica, clinical experiences, and study abroad courses;
3. Performance or studio courses in art, dance, theatre, and music;
4. Skills courses in criminal justice; and,
5. Graduate courses.

College preparatory and vocational preparatory courses may not be used to meet degree requirements and are not transferable.

Questions about the Statewide Course Numbering System and appeals regarding course credit transfer decisions should be directed to: *Florida Department of Education, Office of Postsecondary Education Coordination 401 Turlington Building, Tallahassee, FL 32399-0400.* Special reports and technical information may be requested by calling telephone number *(850) 245-0427*, or Suncom *205-0427*.

COURSE PREFIXES, DEFINITIONS, AND LOCATIONS

How to Find a Course:

The following lists course subjects alphabetically by letter prefix. The column to the right contains the department(s) and/or program(s) offering that course subject. The departments/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

Note: courses that may be repeated for credit are designated by an "r" immediately following the course number.

Prefix	Definition	Program(s)
ACG	**Accounting**	Accounting
ADE	**Adult Education**	Educational Leadership and Policy Studies
ADV	**Advertising**	Communication
AFA	**African American Studies**	African American Studies
AFH	**African History**	History
AFR	**Air Force ROTC**	Aerospace Studies
AMH	**American History**	History
AML	**American Literature**	English
AMS	**American and Florida Studies**	American and Florida Studies
ANG	**Anthropology–Graduate**	Anthropology Asian Studies International Affairs Russian and East European Studies
ANT	**Anthropology**	Anthropology International Affairs Russian and East European Studies
ARA	**Arabic Language**	Modern Languages and Linguistics
ARE	**Art Education**	Art Education
ARH	**Art History**	Art Art History Classical Languages, Literature, and Civilization
ART	**Art**	Art
ASH	**Asian History**	Classical Languages, Literature, and Civilization History
ASN	**Asian Studies**	Asian Studies
AST	**Astronomy**	Physics
BCC	**Basic Clinical Clerkship**	Medicine
BCH	**Biochemistry**	Biological Science Chemistry and Biochemistry
BME	**Biomedical Engineering**	Chemical Engineering
BMS	**Biomedical Science**	Medicine
BOT	**Botany**	Biological Science
BSC	**Biological Science**	Biological Science Nursing
BUL	**Business Law**	Risk Management/ Insurance and Real Estate
CAP	**Computer Applications**	Computer Science
CBH	**Comparative Psychology/ Animal Behavior**	Psychology
CCE	**Civil Construction Engineering**	Civil Engineering
CCJ	**Criminology and Criminal Justice**	Criminology and Criminal Justice
CDA	**Computer Design/ Architecture**	Computer Science
CEG	**Civil Geotechnical Engineering**	Civil and Environmental Engineering
CEN	**Computer Engineering Software**	Computer Science
CES	**Civil Engineering: Structures**	Civil and Environmental Engineering
CGN	**Civil Engineering**	Civil and Environmental Engineering
CGS	**Computer General Studies**	Computer Science Educational Leadership and Policy Studies Elementary and Early Childhood Education Management Information Systems
CHD	**Child Development**	Family and Child Sciences
CHI	**Chinese Language**	Modern Languages and Linguistics
CHM	**Chemistry**	Chemistry and Biochemistry
CHS	**Chemistry—Specialized**	Chemistry and Biochemistry
CHT	**Chinese Literature in Translation**	Modern Languages and Linguistics
CIS	**Computer and Information Systems**	Computer Science
CJC	**Criminal Justice: Corrections**	Criminology and Criminal Justice
CJE	**Criminal Justice: Law Enforcement**	Criminology and Criminal Justice
CJJ	**Criminal Justice: Juvenile Justice**	Criminology and Criminal Justice
CJL	**Criminal Justice: Law and Process**	Criminology and Criminal Justice
CJT	**Criminal Justice Technology**	Criminology and Criminal Justice
CLA	**Classical and Ancient Studies**	Classical Languages, Literature, and Civilization History
CLP	**Clinical Psychology**	Psychology
CLT	**Classical Literature in Translation**	Classical Languages, Literature, and Civilization

COA	**Consumer Affairs**	Family and Child Sciences Textiles and Consumer Sciences
COM	**Communication**	Communication
COP	**Computer Programming**	Computer Science
COT	**Computer Theory**	Computer Science
CPO	**Comparative Politics**	Political Science
CPS	**Comparative Policy Studies**	Social Science
CRW	**Creative Writing**	English
CTE	**Clothing and Textiles**	Textiles and Consumer Sciences Interior Design
CWR	**Civil Water Resources**	Civil and Environmental Engineering
CYP	**Community Psychology**	Psychology
CZE	**Czech Language**	Modern Languages and Linguistics
DAA	**Dance Activities**	Dance Sport Management, Recreation Management and Physical Education
DAE	**Dance Education**	Dance Sport Management, Recreation Management and Physical Education
DAN	**Dance**	Dance
DEM	**Demography**	Sociology
DEP	**Developmental Psychology**	Psychology
DIE	**Dietetics**	Nutrition, Food and Exercise Sciences
EAB	**Experimental Analysis of Behavior**	Psychology
EAP	**English as a Second Language for Academic Purposes**	English Middle and Secondary Education
EAS	**Aerospace Engineering**	Mechanical Engineering
ECH	**Chemical Engineering**	Chemical Engineering
ECO	**Economics**	Economics
ECP	**Economic Problems and Policy**	Economics Finance
ECS	**Economic Systems and Development**	Economics
EDA	**Education: Administration**	Educational Leadership and Policy Studies
EDE	**Education: Elementary**	Elementary and Early Childhood Education
EDF	**Education: Foundations**	Educational Leadership and Policy Studies Educational Psychology and Learning Systems Middle and Secondary Education
EDG	**Education: General**	Educational Leadership and Policy Studies Educational Psychology and Learning Systems Middle and Secondary Education
EDH	**Education: Higher**	Educational Leadership and Policy Studies
EDM	**Education: Middle School**	Educational Leadership and Policy Studies
EDP	**Educational Psychology**	Educational Psychology and Learning Systems Psychology
EDS	**Education: Supervision**	Educational Leadership and Policy Studies Elementary and Early Childhood Education
EEC	**Education: Early Childhood**	Elementary and Early Childhood Education
EED	**Education: Emotional Disorders**	Special Education
EEL	**Electrical Engineering**	Electrical and Computer Engineering
EES	**Environmental Engineering Science**	Civil and Environmental Engineering
EEX	**Education: Exceptional Child—Core Competencies**	Special Education
EGI	**Education: Gifted Child**	Special Education
EGM	**Engineering Mechanics**	Mechanical Engineering
EGN	**General Engineering**	Civil and Environmental Engineering Chemical Engineering Industrial Engineering Mechanical Engineering
EGS	**Engineering Graphics**	Industrial Engineering
EIN	**Industrial Engineering**	Industrial Engineering
ELD	**Education: Specific Learning Disabilities**	Special Education
EMA	**Materials Engineering**	Mechanical Engineering Industrial Engineering
EME	**Education: Technology and Media**	Educational Leadership and Policy Studies Educational Psychology and Learning Systems
EML	**Mechanical Engineering**	Mechanical Engineering
EMR	**Education: Mental Retardation**	Special Education
ENC	**English Composition**	English
ENG	**English: General**	English
ENL	**English Literature**	English
ENV	**Environmental Engineering**	Civil and Environmental Engineering
EPH	**Education: Physical and Multiple Handicaps**	Special Education
ESE	**Education: Secondary**	Educational Leadership and Policy Studies
ESI	**Industrial Engineering**	Industrial Engineering
EUH	**European History**	Classical Languages, Literature, and Civilization History
EUS	**Russian and East European Studies**	Russian and East European Studies
EVI	**Education: Visual Impairments**	Special Education
EVT	**Education: Vocational/ Technical**	Educational Leadership and Policy Studies
EXP	**Experimental Psychology**	Psychology

FAD	**Family Development**	Family and Child Sciences
FIL	**Film**	Communication Modern Languages and Linguistics Motion Picture, Television, and Recording Arts
FIN	**Finance**	Finance Multinational Business Operations
FLE	**Foreign Language Education**	Middle and Secondary Education
FOL	**Foreign and Biblical Languages**	Modern Languages and Linguistics
FOS	**Food Science**	Nutrition, Food and Exercise Sciences
FOT	**Foreign and Biblical Languages in Translation**	Modern Languages and Linguistics
FOW	**Foreign Writings**	Modern Languages and Linguistics
FRE	**French Language**	Modern Languages and Linguistics
FRT	**French Literature in Translation**	Modern Languages and Linguistics
FRW	**French Literature (Writings)**	Modern Languages and Linguistics
FSS	**Food Service System**	Hospitality Nutrition, Food and Exercise Sciences
GEA	**Regional Geography**	Geography
GEB	**General Business**	Entrepreneurship and Small Business Management Management Marketing
GEO	**Systematic Geography**	Geography
GER	**German Language**	Modern Languages and Linguistics
GET	**German Literature in Translation**	Modern Languages and Linguistics
GEW	**General Literature (Writings)**	Modern Languages and Linguistics
GLY	**Geological Sciences**	Geological Sciences
GRA	**Graphic Arts**	Art
GRE	**Greek (Language Study)**	Classical Languages, Literature, and Civilization
GRW	**Greek Literature (Writings)**	Classical Languages, Literature, and Civilization
HBR	**Hebrew (Modern)**	Modern Languages and Linguistics Religion
HEE	**Home Economics Education**	Family and Child Sciences Textiles and Consumer Sciences
HFT	**Hospitality, Food Tourism**	Hospitality
HHD	**Housing and Home Design**	Textiles and Consumer Sciences
HIS	**History: General**	History Humanities
HOE	**Home Economics: General**	Family and Child Sciences Textiles and Consumer Sciences
HSA	**Health Service Administration**	Middle and Secondary Education
HSC	**Health Education and Safety**	Middle and Secondary Education Nutrition, Food and Exercise Sciences
HUM	**Humanities**	Humanities
HUN	**Human Nutrition**	Nutrition, Food and Exercise Sciences
IND	**Interior Design**	Interior Design
INP	**Industrial/Applied Psychology**	Psychology
INR	**International Relations**	International Affairs Political Science
ISC	**Interdisciplinary Natural Science**	Biological Science Chemistry and Biochemistry Meteorology Oceanography Psychology
ISM	**Information and Management Sciences**	Management Information Systems
ISS	**Social Science: Interdisciplinary**	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 Language**	Modern Languages and Linguistics
KOR	**Korean Language**	Modern Languages and Linguistics
LAE	**Language Arts and English Education**	Elementary and Early Childhood Education English Middle and Secondary Education
LAH	**Latin American History**	History
LAS	**Latin American Studies**	Latin American and Caribbean Studies
LAT	**Latin (Language Study)**	Classical Languages, Literature, and Civilization
LAW	**Law**	Law
LEI	**Leisure**	Sport Management, Recreation Management and Physical Education
LIN	**Linguistics**	Anthropology Communication Disorders English Middle and Secondary Education Modern Languages and Linguistics
LIS	**Library and Information Studies**	Elementary and Early Childhood Education Information Studies
LIT	**Literature**	English Humanities

LNW	**Latin Literature (Writings)**	Classical Languages, Literature, and Civilization
MAA	**Mathematics: Analysis**	Mathematics
MAC	**Mathematics: Calculus/Precalculus**	Mathematics
MAD	**Mathematics: Discrete**	Mathematics
MAE	**Mathematics Education**	Elementary and Early Childhood Education Mathematics Middle and Secondary Education
MAN	**Management**	Finance Management Information Systems Management Marketing Multinational Business Operations
MAP	**Mathematics: Applied**	Mathematics Meteorology Oceanography
MAR	**Marketing**	Marketing Multinational Business Operations
MAS	**Mathematics: Algebraic Structures**	Mathematics
MAT	**Mathematics**	Mathematics
MCB	**Microbiology**	Biological Science
MET	**Meteorology**	Meteorology
MGF	**Mathematics: General/ Finite**	Mathematics
MHF	**Mathematics: History/ Foundations**	Mathematics
MHS	**Mental Health Services**	Educational Psychology and Learning Systems Special Education
MMC	**Mass Media Communication**	Communication Educational Leadership and Policy Studies
MOB	**Molecular Biophysics**	Molecular Biophysics
MSL	**Military Science**	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**	Music
MUN	**Music: Ensembles**	Music
MUO	**Music: Opera/Music Theatre**	Music
MUR	**Music: Church Music**	Music
MUS	**Music**	Music
MUT	**Music: Theory**	Music
MUY	**Music: Therapy**	Music
MVB	**Music: Applied—Brasses**	Music
MVH	**Music: Applied—Historical Instruments**	Music
MVJ	**Music: Applied—Jazz**	Music
MVK	**Music: Applied—Keyboard**	Music
MVO	**Music: Applied—Other Instruments**	Music
MVP	**Music: Applied—Percussion**	Music
MVS	**Music: Applied—Strings**	Music
MVV	**Music: Applied—Voice**	Music
MVW	**Music: Applied—Woodwinds**	Music
NGR	**Nursing: Graduate**	Nursing
NUR	**Nursing**	Nursing
OCB	**Oceanography: Biological**	Oceanography
OCC	**Oceanography: Chemical**	Oceanography
OCE	**Oceanography**	Meteorology Oceanography
OCG	**Oceanography: Geological**	Oceanography
OCP	**Oceanography: Physical**	Mathematics Meteorology Oceanography
ORI	**Oral Interpretation**	Communication
PAD	**Public Administration and Policy**	Public Administration and Policy
PAX	**Peace Studies**	International Affairs
PCB	**Process Biology**	Biological Science
PCO	**Psychology for Counseling**	Educational Psychology and Learning Systems
PEL	**Physical Education Activities (General): Land—Object Centered**	Sport Management, Recreation Management and Physical Education
PEM	**Physical Education Activities (General): Land—Performance Centered**	Sport Management, Recreation Management and Physical Education
PEN	**Physical Education Activities (General): Water, Snow, Ice**	Oceanography Sport Management, Recreation Management and Physical Education
PEO	**Physical Education Activities (Professional): Land—Object Centered**	Sport Management, Recreation Management and Physical Education
PEP	**Physical Education Activities (Professional): Land—Performance Centered**	Sport Management, Recreation Management and Physical Education
PEQ	**Physical Education Activities (Professional): Water, Snow, Ice**	Sport Management, Recreation Management and Physical Education
PET	**Physical Education Theory**	Educational Psychology and Learning Systems Elementary and Early Childhood Education Nutrition, Food and Exercise Sciences Sport Management, Recreation Management and Physical Education
PGY	**Photography**	Art
PHH	**Philosophy: History**	Philosophy
PHI	**Philosophy**	Philosophy Religion
PHM	**Philosophy of Man and Society**	Philosophy Political Science
PHP	**Philosophers and Schools**	Philosophy
PHY	**Physics**	Physics

PHZ	**Physics: Specialized**	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	**Psychology of Personality**	Psychology
PRT	**Portuguese Literature in Translation**	Modern Languages and Linguistics
PSB	**Psychobiology and Neuroscience**	Biological Science Educational Psychology and Learning Systems Psychology
PSC	**Physical Science**	Chemistry and Biochemistry Geological Sciences Meteorology Oceanography
PSY	**Psychology**	Psychology
PUP	**Public Policy**	Political Science
PUR	**Public Relations**	Communication
QMB	**Quantitative Methods in Business**	Finance Management Information Systems Marketing Statistics
RCS	**Rehabilitative Counseling Services**	Special Education
RED	**Reading Education**	Elementary and Early Childhood Education
REE	**Real Estate**	Risk Management/ Insurance and Real Estate
REL	**Religion**	Religion
RMI	**Risk Management/Insurance**	Risk Management/ Insurance and Real Estate
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
SAL	**Sanskrit**	Religion
SCE	**Science Education**	Biological Science Chemistry and Biochemistry Elementary and Early Childhood Education Meteorology Middle and Secondary Education
SCW	**Serbo-Croatian Literature (Writings)**	Modern Languages and Linguistics
SDS	**Student Development Services**	Educational Leadership and Policy Studies Educational Psychology and Learning Systems
SEC	**Serbo-Croation Language**	Modern Languages and Linguistics
SED	**Speech Education**	Communication
SLL	**Slavic Language**	Modern Languages and Linguistics
SOP	**Social Psychology**	Psychology
SOW	**Social Work**	Social Work
SPA	**Speech/Language Pathology and Audiology**	Communication Disorders
SPC	**Speech Communication**	Communication
SPN	**Spanish Language**	Modern Languages and Linguistics
SPS	**School Psychology**	Educational Psychology and Learning Systems Psychology
SPT	**Spanish Literature in Translation**	Modern Languages and Linguistics
SPW	**Spanish Literature (Writings)**	Modern Languages and Linguistics
SSE	**Social Studies Education**	Elementary and Early Childhood Education Middle and Secondary Education
STA	**Statistics**	Statistics
SYA	**Sociological Analysis**	Sociology
SYD	**Demography and Area Studies**	Political Science Sociology
SYG	**Sociology: General**	Sociology
SYO	**Social Organization**	Sociology
SYP	**Social Processes**	Sociology Educational Psychology and Learning Systems
TAX	**Tax Accounting**	Accounting
THE	**Theatre**	Theatre
TPA	**Theatre Production and Administration**	Theatre
TPP	**Theatre Performance and Training**	Theatre
TSL	**Teaching English as a Second Language**	Middle and Secondary Education
TTE	**Transportation and Traffic Engineering**	Civil and Environmental Engineering
URP	**Urban and Regional Planning**	Urban and Regional Planning
URS	**Urban and Regional Studies**	Urban and Regional Planning
WOH	**World History**	History
WST	**Women's Studies**	Women's Studies
ZOO	**Zoology**	Biological Science

ACADEMIC DEPARTMENTS AND DEGREE PROGRAMS

Department of ACCOUNTING

COLLEGE OF BUSINESS

Chair: Bud Fennema; *Andersen Professor:* Hillison; *Deloitte and Touche Professor:* Morton; *Ernst and Young Professor:* Fennema; *KPMG Professor:* Reimers; *Professors*: Hasselback, Hillison, R.C. Icerman, Reimers; *Associate Professors:* Bathke, Billings, Dunn, Dusenbury, Fennema, J.D. Icerman, Morton, Paterson; *Assistant Professors*: Dee, Durtschi, Gerard, Lulseged, Rai; *Lecturers:* Pierno, Sudano

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 nonprofit organizations. Doctoral graduates are faculty members at some of the nations 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, analytical analyses of accounting problems, 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 all requirements to sit for the Certified Public Accountants Examination 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. 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 any major. Admission decisions are made by an admissions committee after considering all relevant information. Applicants are required to submit transcripts of prior course work, an acceptable score on the Graduate Management Admissions Test (GMAT), letters of recommendation, and a personal statement. While there are no absolute minimum criteria for admission, successful applicants usually have a GMAT score of 500 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 318, College of Business, The Florida State University, Tallahassee, FL, 32306-1110 (gradprog@cob.fsu.edu).*

Students in the master of accounting program select a major area from one of four: **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 (33) semester hours. Each major area includes courses specifically designed for that area.

Master of Accounting Program for Nonbusiness Majors

The Department of Accounting also offers a MAcc program for nonbusiness undergraduate majors. Full-time students should be able to complete the 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. Application to the MAcc program is made in the last term of undergraduate foundation coursework.

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

Accounting Information Systems

Economics of the National Economy

Law for Accountancy

Auditing Theory and Application I

Federal Tax Accounting I

Concepts of Business Management

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 course work 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 Department of Accounting offers several supplementary fellowship awards to doctoral students that are in addition to the financial aid 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 American Accounting Association, and the American Institute of Certified Public Accountants.

Requirements

Graduate-Level Foundation Courses

The courses below are in addition to the general prerequisites of ECP 5706, MAN 5716, and QMB 5355 described elsewhere in this *Graduate Bulletin*, as well as to the calculus I and II requirement:

ACG	5356	Advanced Management Accounting
ACG	5135	Financial Accounting Theory
XXX	XXXX	A course in computer programming (preferably Fortran)
QMB	5755	Studies in Operations Research

The above requirements may be satisfied by equivalent course work taken elsewhere.

Primary Area Course Work

The following doctoral seminars and courses are required in the primary area in accounting.

ACG	6885	Introduction to Accounting Research (3)
ACG	6847	Seminar in Analytical Research (3)
ACG	6696	Seminar in Financial Accounting and Auditing Research (3)
ACG	6896	Seminar in Capital Market-Based Accounting Research (3)
ACG	6835	Seminar in Behavioral Accounting Research (3)
FIN	6808	Foundations of Finance Theory (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 more courses 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 course work.

For application forms and additional information related to graduate accounting programs, contact *The Graduate Office, Room 318, College of Business, The Florida State University, Tallahassee, FL, 32306-1110*, or via email at *gradprog@cob.fsu.edu.*

Definition of Prefixes

ACG — Accounting
GEB — General Business
TAX — Tax Accounting

Graduate 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.

ACG 5005. Accounting Concepts: Introductory (3). Introductory concepts of accounting and uses of accounting information by management; emphasis on theory, uses, and limitations of accounting data in business decision making. Cannot be taken for credit to apply to 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 5308. Accounting Concepts for Managerial Control (3). Prerequisite: ACG 5005. The controllership function in relation to the responsibilities of management; special emphasis on the measurement and control of unit costs and special decisions of management. Cannot be taken for credit for the master of accounting degree.

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 infomation 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 how 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 funishes students 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 5695. Challenges in Professional Accounting (3). Prerequisite or corequisite: 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. Each course is repeatable up to three times.

ACG 5906r. Special Studies in Management (1–3). Prerequisite: Consent of associate dean for academic programs. Each course is repeatable up to three times.

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 towards the master's degree. May be repeated to a maximum of five (5) semester hours.

ACG 5935r. Special Topics in Accounting (1–3). Prerequisite: Permission of instructor. 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 two (2) times as topics vary.

ACG 5945r. Supervised Teaching (1–3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. A maximum of three (3) hours may apply towards the master's degree. May be repeated to a maximum of five (5) semester hours.

ACG 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours of credit is required.

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. Seminar in Partnership Taxation (3). Prerequisite: TAX 4001. Concepts and principles of partnership taxation; the use of partnerships for tax planning.

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: Permission of instructor. 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 (6) semester hours.

ACG 8966. Master's Comprehensive Examination (0).

ACG 8976. Master's Thesis Defense (0).

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 dean for academic programs.

ACG 6696. Seminar in Financial and Auditing Research (3). Prerequisite: Permission of instructor. An introduction to the academic literature in financial accounting and auditing research.

ACG 6835. Seminar in Behavioral Accounting Research (3). Prerequisite: Permission of instructor. A survey of the extant behavioral and human information processing literature in accounting.

ACG 6847. Seminar in Analytical Research (3). Prerequisite: Permission of instructor. A survey of analytical models in financial and cost/managerial accounting research.

ACG 6885. Introduction to Accounting Research (3). Prerequisite: Permission of instructor. A survey of subject areas studied and research methods applied in accounting.

ACG 6896. Seminar in Capital Market-Based Accounting Research (3). Prerequisite: Permission of instructor. A review and analysis of extant accounting research in the capital markets area.

ACG 6916r. Supervised Research (1–3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five (5) semester hours.

ACG 6939r. Seminar in Accounting (3). Research methodologies useful in developing and evaluating accounting theories and principles; historical evaluation of accounting; development of skill in designing accounting research studies. May be repeated to a maximum of twelve (12) 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 (5) semester hours.

ACG 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours is required.

ACG 8964. Doctoral Preliminary Examination (0)

ACG 8985. Dissertation Defense Examination (0).

GEB 6904r. Readings For Examination (1–12). (S/U grade only.) Prerequisite: All course work required for PhD. This course is designed for PhD students who have completed all of their required course work and are preparing to sit for their preliminary examinations in the current semester. May be repeated to a maximum of twenty-four (24) 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*

AGING
see also Interdisciplinary Program in the Pepper Institute on Aging and Public Policy; Health–Related Programs

Certificate Program in the PEPPER INSTITUTE ON AGING AND PUBLIC POLICY

College of Social Sciences

Director: Melissa Hardy (Sociology); *Mildred and Claude Pepper Eminent Scholar Chair:* Quadagno (Sociology); *Professors:* Charness (Psychology), Cowart (Urban and Regional Planning), Hardy (Sociology), Taylor (Sociology); *Associate Professor:* Bourgeois (Communication Disorders); *Assistant Professors*: Barrett, Reynolds (Sociology); *Affiliates:* Barrilleaux, Brooks, Ebener, Ferris, Fournier, Heron, Hinterlong, LaPointe, Licht, MacPherson, Miles, Ouimet, Panton, Ralston, Serow, Shepherd, Toole

The Pepper Institute on Aging and Public Policy serves as a focal point for aging research and education on the campus of The Florida State University. Resources are devoted to supporting individual and collaborative faculty research projects and funding graduate student education. Research activities include health policy; access to health care and health care financing; aging and social change; income security, work and retirement; social welfare and social security reform; end-of-life issues; Alzheimer's patients and their caregivers; and successful aging. Faculty associates and affiliates from many other colleges are also involved in research activities in cognitive aging, elder abuse, the delivery of social services to older clients, the role of nutrition and exercise in improving the functioning of older people and technology aging.

The Pepper Institute on Aging and Public Policy offers special public lectures and conferences as well as an exceptional education outreach program for older adults, **The Academy at FSU**. Through public education and outreach, the Pepper Institute seeks to teach each new generation the importance of life-long learning and the value of service to others. The Pepper Institute is located in the Pepper Center, which houses state of the art research facilities, a computer lab, conference rooms, a survey support center, and faculty offices.

Master's Degree in Aging Studies

The Master of Science in Aging Studies is an interdisciplinary program offered by the College of Social Sciences. The program prepares graduates to assume professional leadership positions in research, administration, planning, implementation and evaluation of programs designed to improve the lives of older adults and their families. Special opportunities exist for studying a wide range of areas including: pension and income security; health policy; access to health care and health care financing; social welfare and social security reform; end-of-life issues; aging and social policy and successful aging.

Admissions to the Program

The program admits students with a minimum of a baccalaureate degree from an accredited program. Admission criteria include a cumulative undergraduate grade point average (GPA) of 3.0 and/or a minimum score of 1000 on the combined verbal and quantitative portions of the general aptitude test of the Graduate Record Examination (GRE.) For students for whom English is a second language, a TOFEL score of 550 (213 on the computer based version) is necessary. In addition to general University admission requirements, the Pepper Institute on Aging and Public Policy requires each applicant to submit a two-page statement of purpose and three letters of reference.

Program Options

The program offers two concentrations — Aging Policy, Evaluation and Research, and Administration in Aging.

- The Aging Policy, Evaluation and Research concentration prepares graduates for both the private and public sectors to organize, evaluate, and manage information and programs designed to facilitate access to services for the elderly. Graduates will develop the analytical skills necessary to initiate research projects, analyze data, evaluate programs and recommend changes in aging polices for both Florida and the nation.
- The Administration in Aging concentration prepares graduates for leadership in the private and public sectors, to develop and administer programs that enhance services and quality of life for older adults. Graduates will develop an understanding of the special needs and concerns of elders and will learn about the administrative skills necessary to manage and evaluate the effectiveness of alternative methods for providing services.

Course of Study

The program builds upon a core set of requirements, eighteen (18) semester hours, that reflect the basic skills necessary to administer and evaluate programs and data for aging related professional positions. A total of thirty-six (36) semester hours earned at a minimum of a 3.0 GPA, with a maximum of nine (9) semester hours taken S/U are required for graduation.

A six (6) semester hour graduate field practicum is required for the Master in Aging Studies degree. The practicum provides students with a supervised work experience in a professional organization involved in research, training, or direct service in aging. Students may choose to complete a research thesis in lieu of the graduate field practicum.

For elective coursework students will take twelve (12) semester hours selected from a list of eligible academic courses provided for each concentration.

Core Courses

Eighteen (18) semester hours required of all Master in Aging Studies students.

General Aging

Two required courses (select one):

NGR	5255	Dynamics of Aging (3)
SOW	5646	Aging and Old Age: Social Work with the Aged (3)

(select one):

SYP	5735	Sociology of Aging (3)
SYP	5737	The Dynamics of Aging and Social Change (3)

Economics of Aging

One required course (select one):

ECO	5936r	Special Topics [Economics of Aging] (1–3)
PAD	5227	Managing Public Financial Resources (3)

Methods

Two required courses:

Students are advised to take both of their methods courses in the same program.

Methods I

(select one):

PAD	5700	Research Design in Public Administration (3)

SYA	5345	Introduction to Research Methods (3)
URP	5201	Methods of Planning Analysis I: Research and Evaluation (3)

Methods II

(select one):

PAD	5701	Quantitative Analysis in Public Administration (3)
SYA	5455	Social Statistics and Data Analysis (3)
URP	5211	Methods of Planning Analysis II: Statistics (3)

Policy

One required course (select one):

POS	5456	Interest Groups and Policy (3)
PUP	5005	Public Policy: Institutions and Processes (3)
PUP	5007	Models of Public Policy-Making (3)
PUP	5335	Aging Politics and Policy (3)
URP	5530	Policy and Planning for the Aging (3)

Elective Courses

Twelve (12) semester hours are required to complete the selected concentration. With the consent of their advisor, students will select courses that meet the needs of their chosen concentration in aging policy, evaluation, research, or administration in aging.

The Aging Policy, Evaluation and Research Concentration

(select four):

Economics

ECO	5936r	Special Topics [MS Micro I] (1–3)
ECO	5936r	Special Topics [Economics of Aging] (1–3)
ECP	5536	Seminar in Health Economics (3)

Health Care

SYO	5405	Health Institutions and Social Policy (3)
URP	5520	The US Health Care System (3)
URP	5522	Regulatory Aspects of Health Care (3)

Policy

PAD	5327	Public Program Evaluation (3)
PAD	6108	Institutions, Policy and Management (3)
POS	5127	State Government and Politics (3)
PUP	5007	Models of Public Policy-Making (3)
SYD	5215	Morality (3)
SYO	5545	The Changing Workplace (3)

Administration in Aging Concentration

(select four):

Health and Aging

PSY	6919r	Seminar in Current Research Topics (1–3)
SOW	5156	Social and Emotional Aspects of Illness (3)
SOW	5214	Policy Innovations in Social Welfare (3)
URP	5522	Regulatory Aspects of Health Care (3)

Economics and Aging

ECO	5936r	Special Topics: Economics of Aging (1–3)

Administration

PAD	5417	Human Resource Management (3)
MAN	5204	Organization Theory (3)
MAN	5245	Organizational Behavior (3)
MAN	5305	Personnel/Human Resource Management (3)
ISS	5945	Internship (3–6) (six semester hours are required to complete the degree)

Certificate in Aging Studies

The Pepper Institute on Aging and Public Policy administers a graduate Certificate in Aging Studies on behalf of the College of Social Sciences. The certificate offers opportunities for interdisciplinary education in aging studies and provides an educational credential that documents the additional training and experience that the student has received in the field of aging. This is recorded on the student's official university transcript. To earn the graduate Certificate in Aging Studies, students must complete a total of twelve (12) semester hours and satisfy the requirements in both coursework and a practicum in aging studies.

1. Students should complete nine (9) semester hours of coursework selected from a list of approved aging studies courses. No more than two courses may be taken in the student's major area of study; at least one course must be taken through another department. Approved courses offered for the upcomming semester are listed on the Pepper Institute website at *http://www.pepperinstitute.org*. Select the "Certificate Program" link to view the current semester's approved course listing.

2. To complete the internship, students should enroll in ISS 5945, Internship.

Selected Course Offerings

ADE	5193	Education and Training in Gerontology (3)
ISS	5945	Internship (3–6)
ISS	5930r	Special Topics in Social Science (1–3)
MHS	6938r	Special Topics in Counseling Psychology (3)
NGR	5255	Dynamics of Aging (3)
PSY	6919r	Seminar in Current Research Topics (1–3)
SOW	5156	Social and Emotional Aspects of Illness (3)
SOW	5646	Aging and Old Age: Social Work with the Aged (3)
SYP	5735	Sociology of Aging (3)
SYP	5737	The Dynamics of Aging and Social Change (3)
URP	5520	The US Health Care System (3)
URP	5522	Regulatory Aspects of Health Care (3)
URP	5530	Policy and Planning for the Aged (3)

Other opportunities for graduate education in the field of aging are available through cooperative programs with various academic departments. For further information, see the appropriate chapter in this *Graduate Bulletin.* For information, contact *slampman@fsu.edu* or *(850) 644-3520*.

AMERICAN HISTORY
see Economics; History

AMERICAN LITERATURE
see English

Program in AMERICAN AND FLORIDA STUDIES

College of Arts and Sciences

Director: John Fenstermaker (English); *Advisory Committee:* Bearor (Art History), Green (History), Jumonville (History), Lhamon (English), Moore (English), Rowe (English)

American and Florida Studies is concerned with the culture of the United States and Florida from crossdisciplinary 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.

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

Candidates for the degree of master of arts 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) and a minimum cumulative GPA of 3.0 are required for admission.

The 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 (30) semester hours of course work at the graduate level including six (6) semester hours of thesis. A student who elects not to write a thesis must complete a minimum of thirty-two (32) semester hours of course work at the graduate level and comprehensive examinations. 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 studies in tailoring a course of study to fit the needs of the individual student.

Graduate Certificate Program

The program offers a graduate certificate in American and Florida Studies. This 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 pluralisitic 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 (12) 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. 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 (6) semester hours.

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 (6) semester hours.

AMS 5815r. Seminar in American Thought (3). May be repeated to a maximum of six (6) semester hours.

AMS 5908r. Directed Individual Study (1–3). May be repeated to a maximum of six (6) semester hours.

AMS 5915r. Supervised Research (1–3). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

AMS 5940r. Supervised Teaching (1–3). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

AMS 5942r. Internship in an Approved American Studies Field (3–9). (S/U grade only.) Must complete nine (9) semester hours on the graduate level before registering for the internship. May be repeated to a maximum of nine (9) semester hours.

AMS 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

AMS 8966r. Master's Comprehensive Examination (0).

AMS 8976r. Master's Thesis Defense (0).

ANTHROPOLOGY
see also Asian Studies; Latin American and Caribbean Studies

Department of ANTHROPOLOGY

COLLEGE OF ARTS AND SCIENCES

Chair: Dean Falk; *Professors*: Doran, Falk, Grindal, Pohl; *Associate Professors:*Ho, Josserand, Marrinan, Peters; *Assistant Professors:* Faught, Parkinson, Uzendoski, Ward; *Professor Emeritus:* Paredes; *Courtesy Professors:* Anderson, Fisher, Keel, McEwan, Purdum, G. Smith, R. Smith; *Adjunct Professors:* Gardner, Harmon, Hopkins, Stojanowski

The Department of Anthropology offers graduate training in most of the major areas of anthropology. Course work and research experience are available in prehistoric and historic archaeology, European prehistory, Mesoamerican archaeology and linguistics, underwater archaeology, paleodemography, zooarchaeology, American Indian studies, applied anthropology, studies of contemporary American South, peace studies, osteology, forensic anthropology, paleoanthropology, and primate behavior. Geographic areas of study by the faculty include the Southeastern United States, the Caribbean, Mesoamerica, South America, Africa, China, Europe, and Japan.

The 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 artifactual 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. These include a 17th-century Spanish mission site, a Hungarian Copper Age site, and Maya agricultural and settlement sites in Belize, Central America. Through SEAC and The Florida State University Scientific Diving Program, there are opportunities for advanced students to participate in underwater archaeological activities.

Training and field experience also are available in physical 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 (School of Music), and the international/intercultural education program (College of Education).

Master's Degree

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 and master of science 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.

For a course-type master's degree students must complete a minimum of thirty-two (32) semester hours, of which at least twenty-one (21) hours must be taken on a letter-grade basis. Students also must write and defend a predoctoral paper in addition to meeting other college requirements. For a thesis-type master's degree, students must complete a minimum of thirty (30) semester hours, of which at least twenty-four (24) hours must be taken on a letter-grade basis. Students also must write and defend a master's thesis. Individual programs are planned by students and their advisor. 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 degree at The Florida State University. Students working toward the master of arts degree also must complete a University-wide humanities requirement. Both requirements are described in the "Graduate Degree Requirements" chapter of this *Graduate Bulletin*. The master of science degree 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 in Anthropology

For current admission and coursework requirements please see the departmental website at *http://www.anthro.fsu.edu*.

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 (3) 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.

Upon admission, the doctoral student's previous coursework and experience will be evaluated by the departmental doctoral studies committee. Recommendations will be made regarding major field area selections, elective course work and appropriate language proficiency.

Each student will declare a major field within anthropology: sociocultural anthropology, physical anthropology, linguistic anthropology, or archeological anthropology.

Course Requirements

Specific course requirements are as follows:

1. Students will be required to take core courses in the four sub-fields of anthropology and a graduate pro-seminar in their first year. For those students entering the program with a master's degree from another institution, the core courses must be taken in addition to the thirty (30) semester hours required for the PhD. 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)
ANG	5675	Core Seminar in Linguistic 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 predoctoral 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 predoctoral paper. Successful completion of the qualifying examination or defense of the predoctoral 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 thirty (30) semester hours of course work during the first three to four (3-4) 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 [12] semester hours) will take up to one and one-half years following the qualifying examination. Dissertation writing (the last twelve [12] 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. The Florida State University requires that the dissertation be completed within five years of admission to candidacy.

Doctoral Degree in Humanities

The 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 5001. Proseminar (1). (S/U grade only.) Designed to acquaint beginning graduate students with the organization of anthropology as a profession and to introduce them to basic bibliographic tools and related skills in anthropology.

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 5115. 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 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 5125. Geoarchaeology (3). Designed in a seminar style, this course presents a wide range of pertinent archaeological issues including sedimentology, stratigraphy, and soil development and description. Alluvial aeolian, karstic, cave, coastal and other geological environments are reviewed.

ANG 5127. Material Culture (3). Provides an overview of the methods and techniques of material culture (artifact) analysis. The diversity of material remains, manufacturing techniques, and analytical strategies and results are the primary focus of the class.

ANG 5128. Seminar in Lithic Analysis (3). This seminar-style course introduces students to the technology of flint knapping, analysis of the chipping debris, projectile point and tool typology, and use/wear characteristics.

ANG 5132. Underwater Archaeology (3). This course introduces students to technological approaches, site discovery and sampling strategies, process and history of sea level rise, wind and current patterns related to travel by water, and basic nautical technology and concepts.

ANG 5133. Seminar in Submerged Sites Archaeology (3). Designed in a seminar style, this course examines in detail key concepts in submerged prehistoric sites archaeology. Sea level rise, environmental and paleolandscape reconstruction, known sites, and underwater archaeological theory also are covered.

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 5136. Ship Construction: Dugouts to Steamboats (3). In this course, students will gain an appreciation and understanding of ancient and historic watercraft through studying specific ship construction techniques within cultural, historical, environmental and economic contexts.

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 5138. Ship Research and Reconstruction (3). Students will gain practical experience in studying ship and boat construction, and will present research orally, in writing, and through illustrations such as ships' lines.

ANG 5139r. Seminar in Underwater Archaeology (3). Prerequisites: ANT 3105; 4133. Topical issues, methods, and theory in underwater archaeology. Historic and prehistoric underwater research themes related to larger issues of anthropology. Specific topics vary by semester. May be repeated to a maximum of six (6) semester hours.

ANG 5142. European Prehistory (3). This course introduces students to the archaeology of the European continent from its initial colonization by early hominids during the Lower Paleolithic through the archaic state civilizations of the Aegean Bronze Age.

ANG 5152. Paleoindian Archaeology (3). Prerequisite: ANT 3105. This course reviews the origins and antiquity of people in the New World by discussing the historical developments of anthropology and Paleoindian archaeology that are pertinent, and by reviewing selected early sites and artifact assemblages known in the Western Hemisphere.

ANG 5155. Regional Archaeology: Southeast United States (3). Critical evaluation of special problems and processes of cultural evolution and adaptation in the southeast.

ANG 5169r. 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, calendries 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 (9) 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 5182. Techniques of Archaeological Conservation (3). Prerequisite: ANT 3105. This course is designed to familiarize students with principles and methods for the treatment, conservation, display, and curation of cultural materials gathered during archaeological research. Coursework will include readings and practice with treatments for a diverse range of archaeological materials: metals, woods, fabrics, leather, ceramics, bone, and chipped stone. A high school level of basic chemistry concepts is recommended.

ANG 5193r. Seminar in Archaeology (3). Seminar topics vary from semester to semester. Past topics have included paleodemography, quantitative methods, research design, and others. May be repeated to a maximum of six (6) semester hours.

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 (6) semester hours.

ANG 5196. Public Archaeology (3). This course outlines the historic development of public archaeology and cultural resource management. Techniques and approaches applying anthropological perspectives contributing to the development of public archaeology as a viable method of dealing with prehistoric and historic materials in the United States are stressed.

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 5246. Contemporary Folk Religion (3). Research and fieldwork among contemporary religious groups in the southern United States; attention to basic readings on anthropology of religion, religion of the South, and current religious movements. Prepares student in methods of data collection and interpretation.

ANG 5255. Peasant Societies (3). Characteristics of peasants cross-culturally with emphasis on exploration of economic, social, and psycho-cultural aspects and dynamics of socio-cultural change affecting peasant societies.

ANG 5269. Economic and Ecological Approaches in Anthropology (3). Seminar on current literature and theories in ecological and economic anthropology, including debate between cultural ecologists and structural Marxists, between archaeology and related disciplines (landscape geography, social anthropology). Selected topics related to consumption, commodities, exchange, and gender. Controversies over foragers and egalitarian societies.

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 5337. Peoples and Cultures of Amazonia (3). This course explores problems of similarity, difference, divinity and nature/culture within Amazonia. It addresses the classical anthropological problem of where one culture ends and another begins with regard to Amazonian peoples, regional networks of trade, similar knowledge of systems (shamanism, myth, ritual), rainforest ecosystems and analogous social principles.

ANG 5478. Cultural Evolution (3). This course explores ethnographic and archaeological models to understand and explain the various forms political and economic organizations exhibited by human societies.

ANG 5491r. Seminar in Social Anthropology (3). May be repeated to a maximum of six (6) semester hours.

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 (6) semester hours.

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 5675. Core Seminar in Linguistic Anthropology (3). This course offers a broad survey of anthropological linguistics, from the origin and characteristics of human language and its relation to the other animal communication systems, to language structure and its description, principles of linguistic fieldwork, and historical/comparative linguistics. Other topics covered include the following: the interaction of language and culture; sociolinguistics; the ethnography of communication; ethnoscience; language acquisition; language policy and bilingual education; and linguistic prehistory.

ANG 5677r. Seminar in Linguistic Anthropology (3). Topics offered will include strong methodological and theoretical components, combined with in-depth coverage of an areal or thematic subject. May be repeated to a maximum of nine (9) semester hours.

ANG 5701. Applied Anthropology (3). The methods, problems, and pitfalls in the application of anthropological knowledge, concepts, and techniques to understanding, facilitating, and evaluating planned change in human activities.

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 (9) semester hours.

ANG 5905r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

ANG 5906r. Directed Individual Study (1–3). May be repeated to a maximum of three (3) semester hours.

ANG 5910r. Supervised Research (1–3). (S/U grade only.) May be repeated to a maximum of three (3) semester hours.

ANG 5940r. Supervised Teaching (1–3). (S/U grade only.) May be repeated to a maximum of three (3) 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 students academic advisor and a collaborating museum professional. May be repeated to a maximum of nine (9) semester hours. Concurrent registration is permitted.

ANG 5971r. Master's Thesis (1–6). (S/U grade only.) Six (6) semester hours credit required.

ANG 5976r. Master's Thesis Defense (0). (S/U grade only.)

ANG 6199r. Research Seminar in Archaeology (3). Presentation and discussion of research and analysis issues associated with current student and faculty projects. Topics vary accordingly. May be repeated to a maximum of six (6) semester hours.

ANG 6499r. Research Seminar in Sociocultural Anthropology (3). Presentation and discussion of research and analysis issues associated with current students and faculty projects. Topics vary accordingly. May be repeated once when topics change. May be repeated to a maximum of nine (9) semester hours.

ANG 6590r. Research Seminar in Physical Anthropology (3). Presentation and discussion of research and analysis issues associated with current student and faculty research projects. Topics vary accordingly. May be repeated when topics change. May be repeated to a maximum of nine (9) semester hours.

ANG 6690r. Research Seminar in Linguistic Anthropology (3). Presentation and discussion of research and analysis issues associated with current student and faculty projects. Topics vary accordingly. May be repeated once when topics change. May be repeated to a maximum of nine (9) semester hours.

ANG 6907r. Directed Independent Study (1-3). May be repeated to a maximum of six (6) semester hours.

ANG 6908r. Directed Independent Study (1-3). May be repeated to a maximum of six (6) semester hours.

ANG 6930r. Advanced Seminar in Anthropology (3). Topics vary. May be repeated to a maximum of twenty-four (24) semester hours.

ANG 6980r. Dissertation (1-12). May be repeated to a maximum of twelve (12) semester hours.

ANG 8964. Doctoral Qualifying Examination (0).

ANG 8966r. Master's Comprehensive Examination (0).

ANG 8985. Defense of Dissertation (0).

APPLIED BIOLOGY
see Biological Sciences; Nursing

ARABIC LANGUAGE
see Modern Languages and Linguistics

Department of ART

School of Visual Arts and Dance

Chair: Roald Nasgaard; *Professors:* Blakely, Burggraf, Fichter, Nasgaard, Roche, Williams; *Associate Professors:* Bocz, Bowens, Garcia-Roig, Hartwell, Hook, Lindbloom, Messersmith, Odita, Rubini, Rutkovsky; *Assistant Professors:* Groeniger, Roberson; *Assistant in Art:* Wyatt-Magalian; *Professors Emeriti:* Bell, Walmsley

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.

Media

The Department of Art faculty admits graduate students in the Fall of each year. Work is usually done in painting, sculpture, drawing, printmaking, performance, photography, video, electronic media, and clay. However, 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 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 student's 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), designer, creative director, illustrator, photographer, cinematographer, animator, production artist, audiovisual specialist, and type designer, to name the most obvious. Many graduates of the MFA program choose careers in college teaching, while others pursue careers as exhibiting artists or freelance designers. In career advisement, as in much of the curriculum, the greatest encouragement is given to achieving the goal of professional artist.

Facilities

The art department is housed in four locations, including two large warehouses converted to studio spaces and equipped to meet the needs of working artists. In these spaces, students participate in group seminar classes and individual tutorials, and faculty members will typically stop by and talk about specific problems suggested by the work, or they may bring up more general artistic issues or technical problems. These discussions are very informal. A rich dialogue always occurs among students.

Visiting Artists

An active visiting artist program brings people in from all parts of the country who are experts in their field. They will usually give a general lecture with slides or other electronic media, as well as informal critiques. The University **Spring Celebration of the Arts** also brings prominent artists, critics, and historians to the campus.

University Fine Arts Gallery and Museum

The University Fine Arts Gallery and Museum is an integral part of the educational mission of the art 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. Students display their one-person thesis exhibitions either in the large-scale warehouse space, which closely resembles a SoHo loft, or in the University Fine Arts Gallery. 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 that artists have always faced.

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. Technical assistantships are awarded to first-year or second-year students. Teaching assistantships are awarded in the second year of residency except in the case of students with a master of arts degree or teaching experience. Financial assistance is awarded based on merit.

Requirements

Admission

In addition to University admission requirements, the department requires that all applicants submit a portfolio of 20 slides of recent original work for review. Where it is necessary, other media, such as videotape or photographs, may be submitted in place of slides. Please contact the art department for more specific information and a copy of the *MFA Handbook.*

Program

The master of fine arts 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 two-year residency with a minimum requirement of sixty (60) semester hours at the graduate level. The program includes a minimum of thirty-two (32) semester hours in studio art, eleven (11) hours of electives within or outside the department, a minimum of three courses (nine [9] hours) in art history at the graduate level, and a minimum of eight (8) hours toward preparation of the graduate exhibition and thesis. All students are required to produce a thesis document as part of their graduation thesis exhibition. While it can be a researched position paper about a pertinent art issue, it is more typically a catalog, brochure, or other document prepared for the graduation exhibition, in which case it should be a creative work in its own right.

Review Process

The student progresses through the MFA program by a series of regular 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 exhibition reviews; students who do not pass are required to resubmit their work at a later time.

Definition of Prefix

ART — Art

Graduate Courses in Studio Art

ART 5810r. Seminar in Studio Problems (4). Faculty develops timely topics of interest and importance. May be repeated to a maximum of twelve (12) semester hours.

ART 5907r. Directed Individual Study (1–4). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

ART 5934r. Contemporary Art Seminar (1). (S/U grade only.) Visiting artists forum: lectures by visiting artists and other guests with both group and private dialogue with each guest. May be repeated to a maximum of six (6) semester hours.

Graduate Workshops

The workshop system permits the student to select professors based on the students interest and needs.

ART 5927Cr. Graduate Workshop (1–4). Tutorial. May be repeated to a maximum of twenty-eight (28) semester hours.

ART 5928Cr. Graduate Workshop (4). Prerequisite: ART 5927Cr. May be repeated to a maximum of twenty-eight (28) semester hours.

ART 5929Cr. Graduate Workshop (4). Prerequisites: ART 5927Cr, 5928Cr. May be repeated to a maximum of twenty eight (28) semester hours.

ART 5937r. Graduate Instruction in Advanced Technical Problems (4–8). May be repeated to a maximum of eight (8) semester hours.

ART 5940r. Supervised Teaching (1–3). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

ART 5972r. Graduate Show and Thesis (1–8). (S/U grade only.) Students sign up for this course in preparation for their Show and Thesis review. This is typically during their third and fourth semesters of residency. May be repeated to a maximum of eight (8) semester hours. A minimum of six (6) semester hours credit is required.

Department of ART EDUCATION

School of Visual Arts and Dance

Acting Chair: Marcia L. Rosal; *Professors:* Anderson, Dorn, McRorie, Rosal; *Associate Professors:* Finnegan, Troeger; *Visiting Assistant Professor:* Gussak

The Florida State University 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 in arts administration, the master of arts and master of science, specialist, doctor of philosophy, and doctor of education 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 (30) semester hours in art and/or art education course work. 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 course work, results from the Graduate Record Examinations (GRE), three letters of recommendation, a slide portfolio of the candidate's studio work (and the candidate's student's work if applicable) in a clear plastic sheet, and a 1,000-word biography which 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 on a 4.0 scale for all hours after the first sixty (60) semester hours of undergraduate education for admission to the program. In addition, two years of teaching experience is desired of applicants for option I.

Financial Assistance

Financial assistance is available through federal and state financial aid programs, departmental assistantships, and the college and University fellowships. Certain fellowships are available only to new Florida State University graduate students. Consulting work through the Teacher Education Center Office on campus is also available.

Applications for fellowships and scholarships should be made before January 1st preceding the year the applicant intends to enter. Teaching and research assistantships in the Department of Art Education are available. Applications submitted will be considered after the student has been accepted into the program. Teaching and research assistantship applications should be made to the department preceding the intended entrance to the program.

Requirements for the Master of Arts and Master of Science Degrees in Art Education

Candidates for the master's degree in art education will be required to write a thesis (a minimum of six [6] semester hours) and complete thirty (30) hours of additional course work (thirty-six [36] hours total) or complete a project (a minimum of three [3] semester hours) as part of a thirty-two (32) semester hour program. Normally only 5000 level courses may be used for graduate credit, although with departmental consent two courses may be taken at the 4000 level. **Core requirements** for the master's degrees include ARE 5242, 5641, 5745, and 5935, plus ARE 5971 (thesis) or ARE 5910 (project). Six (6) semester hours may be transferred from another institution with the consent of the faculty.

The needs of the individual student are reflected in the individualized program of study. Generally, courses are determined in counsel with the major professor and committee. Certification requirements, professional registration, and University regulations are subject to change.

Three professional options are available to the master's student in art education: option I comprehensive art education; option II art education certification track; and option III: art therapy. These options represent a diversification in graduate studies which reflects the increased specialization needed for current trends in art education.

Option I. Comprehensive Art Education

This option is designed to develop in-depth knowledge and skills in the areas of production, art history, art criticism, and aesthetics. The program is highly individualized; therefore, courses other than core requirements are not specified. This program is of particular interest to candidates with public school and junior college interest.

Courses may be selected from: the studio art department's graduate workshops in painting, sculpture, mixed media, visual communication, photography, ceramics and other areas; the art history department's advanced areas in ancient and classical, medieval, Renaissance, and Baroque, modern, and non-Western art; and the Department of Philosophy's courses in philosophy of art and aesthetics.

Option II. Art Education Certification

This option provides comprehensive knowledge and skills in formal education systems. Certification requirements for teaching and administration are incorporated into individual programs of study. Courses include certification track course work in addition to the core requirements for the master's degree 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 bachelors degree level. State regulations for certification in art mandate: fifteen (15) semester hours of studio, three (3) of which are three-dimensional; six (6) semester hours of art history; and three (3) semester hours of aesthetics.

Option III. Art Therapy

This option is designed to explore 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 of studies in art therapy adheres to the American Art Therapy Association guidelines for education. The program includes both academic content and clinical experience. Twelve

(12) semester hours of psychology prerequisite courses are required and may include CLP 4143, PSY 2012, 4604, or DEP 3103, 3305.

Requirements for the Master of Arts 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 between 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, fund-raising, grant writing, personnel management, marketing, education, and programming. The program, requiring a minimum of three (3) semesters to complete, consists of a minimum of thirty-nine (39) semester hours, and includes: three courses in the arts administration core (ARE 5262, 5665, 5865, or 5253); a minimum of nine (9) hours in general core requirements (ARE 5245, 5641, 5745, or 5935); twelve (12) hours in interdisciplinary course work such as marketing, accounting, public administration, and human resources management; and nine (9) hours of internship. The remainder of the program is based upon the needs of the individual student and the degree requirements of the School of Visual Arts and Dance.

The **Center for Arts Administration Program's** mission is to provide research and service as a resource base for teaching and learning in arts administration in conjunction with the Department of Art Education. In this role the center and the department coordinate a multidisciplinary academic program in arts administration among several colleges and schools of the arts and in service to the state, government, and business. Courses may be elected by majors in all interested fields. Research capacity is offered to agencies in Florida and the Southeast. Education for arts administrators through short courses, workshops, and lectures for agency personnel provides service for the cultural and economic development of the area.

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 course work in dance, art education/therapy, and social work totaling twelve (12) semester hours with at least three (3) 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, in addition, complete four museum studies core courses, a six (6) 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, School of Visual Arts and Dance.

Requirements for the Specialist Degree in Art Education

The specialist degree in art education 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.

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 which is interdisciplinary and adaptive to deepening knowledge in a particular subspecialty;
3. Continuous evaluation to ascertain achievement level and potential of the student for further development;
4. Research opportunities and support; and
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 or doctor of education degree. Many of the recipients of the doctoral degree are now teaching on the faculties of colleges and universities throughout the United States as well as internationally, or are administering arts programs in educational or arts institutions and agencies.

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 doctor of philosophy degree (PhD) require 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** (24) graduate semester hours in any period of **twelve** (12) consecutive months.

Residency requirements for the doctor of education degree (EdD) require 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** (30) hours in a period of **eighteen** (18) 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 (16) 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

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 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: currently enrolled in a graduate degree program in the participating departments 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 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 5555. Advanced Art Therapy (3). A survey of art therapy through examination of its history, literature, populations, and professional opportunities.

ARE 5641. Critical Analysis (3). Critical appraisal of historical, philosophical, and contemporary trends and issues in the arts and art education.

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 (9) semester hours.

ARE 5910r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 will vary from term to term. May be repeated to a maximum of fifteen (15) semester hours. May be repeated in the same semester.

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 (15) semester hours. May be repeated in the same semester.

ARE 5940. Supervised Teaching (3). (S/U grade only.)

ARE 5944r. Field Laboratory Internship (1–9). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

ARE 5971r. Master's Thesis (3–6). (S/U grade only.) Minimum of six (6) semester hours required.

ARE 5972r. Specialist Thesis (3–6). (S/U grade only.) Minimum of six (6) 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 (6) 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 (6) semester hours.

ARE 6980r. Dissertation (1–12). (S/U grade only.)

ARE 8962r. Specialist Comprehensive Examination (0).

ARE 8964r. Preliminary Doctoral Examination (0).

ARE 8966r. Master's Comprehensive Examination (0).

ARE 8976r. Master's Thesis Defense (0).

ARE 8977r. Specialist Thesis Defense (0).

ARE 8985r. Dissertation Defense (0).

ART HISTORY
see also Asian Studies; Classical Languages, Literature, and Civilization

Department of ART HISTORY

SCHOOL OF VISUAL ARTS AND DANCE

Chair: Paula Gerson; *Professors:* Gerson, Hahn, Neuman; *Associate Professors:* Bearor, Draper, Freiberg, Rose, Weingarden; *Assistant Professor:* Jolles; *Visiting Assistant Professor:* Lee; *Curator:* Hudson; *Professors Emeriti*: Bosch (deceased), Bucher (deceased), Mason (deceased); *Courtesy Professors:* de Grummond, Nasgaard, Palladino-Craig, Pfaff, Pullen

The Department of Art History offers programs leading to the master of arts and the doctor of philosophy 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 one of the related professions, including work in museums, commercial galleries, or in publishing. To provide the greatest flexibility in serving the students' career goals, there are four possible programs (for the specific requirements, see below.) The faculty includes specialists in Far Eastern art, Early Medieval art, Romanesque and Gothic art, Italian and Northern European painting, sculpture, and architecture, Baroque and 18th-century art and architecture, modern architecture, 20th-century art and criticism, American art, contemporary critical theory, history of photography, African art, Oceanic art, and Native American art. The endowed Appleton Eminent Scholar chair in the Arts is filled each year by a distinguished art historian whose field complements those of the permanent faculty. Members of the classics faculty trained in archaeology and art history offer graduate-level courses in Aegean, Greek, Etruscan, Roman, and Egyptian art.

The Department of Art History is supported by a rich array of resources, including three classrooms fully equipped for multimedia presentations and a visual resource center under the direction of two full-time curators. The resource center houses a collection of over 350,000 slides, digital images, videos and pedagogical CDs, and maintains image-based websites related to each art history course. The University library holdings are extensive and include a rare book and facsimile collection. The library also supports many electronic resources and an excellent interlibrary loan division.

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 Tallahassee City Museum. The University administers the **Appleton Museum** in Ocala, which includes over 2,500 works in its permanent collection, and the **Ringling Museum** in Sarasota, with its internationally known collection of European 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**, and **Paris**. 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. A member of the art history department's faculty is assigned to the Florence Study Center, and in addition to teaching, serves as a supervisor for graduate students. 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 in the Southeast. Students are chosen to present papers during a two-day series of meetings, and these papers may be submitted for publication in *Athanor*, a journal for graduate students in art history sponsored by the art history department and the School of Visual Arts 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 Appleton teaching fellowships for doctoral students and Appleton 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 both the MA and doctoral levels. 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 exposure to the field through course work. The selection is made in consultation with the graduate adviser, and with the advice of those professors in the student's major field. Applicants who already hold a MA degree in art history may apply for admission to the PhD program.

The department also offers the possibility of a combined MA and PhD degree. The student may express interest in this degree program, and admission is by invitation of the faculty.

Master of Arts in the History and Criticism of Art

This degree is designed for students who seek to develop research and writing skills that will be useful in a professional career in one of the art historical disciplines. It consists of the following:

1. Select 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)
2. One course in methods of art history (ARH 5795);
3. One course in non-Western art (Japanese, Chinese, Indian, African, Oceanic, Native American art);
4. Three courses in the student's major field;
5. One elective chosen from courses inside or outside the department, to be determined in consultation with the graduate adviser;
6. Reading proficiency in two foreign languages (usually French and German); and
7. Either six (6) semester hours of supervised research for the thesis, or nine (9) semester hours in art history (see below).

Master of Arts: Thesis

Thirty-three (33) semester hours total. 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 three faculty members. Six (6) semester hours are awarded for thesis work.

Master of Arts: Non-Thesis

Thirty-six (36) semester hours total. This option is best suited for students who are interested in pursuing careers in the field which do not require the PhD. In this case, the student will complete the requirements as outlined above, but in place of the six (6) semester hours required for the thesis, an additional nine (9) semester hours (three courses) in art history will be necessary.

Doctor of Philosophy in the History and Criticism of Art

The doctor of philosophy program in the history and criticism of art is suitable for the student who has already completed the master of arts degree in art history and who wishes to pursue a career either in university teaching or in a museum at the highest professional level. It consists of thirty-six (36) semester hours of course work beyond the master's degree plus twenty-four (24) semester hours of supervised dissertation research (sixty [60] semester hours total.)

1. One course in methods of art history (ARH 5795);
2. Five courses in a major area of study;
3. Three courses in a minor area;
4. Three electives to be selected in consultation with the student's major professor and the graduate advisor. These might be taken in other areas of art history or in other disciplines (courses must be approved by the graduate advisor and are dependent on the major and minor areas of study.)

In addition to the above course work, the candidate also must complete the following requirements:

5. Twenty-four (24) semester hours of supervised dissertation research; and
6. 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;
7. A minimum of one semester of residence in The Florida State University Study Center, either in Florence or London (this requirement may be waived when a student has a similar opportunity to pursue original research in a different cultural setting);
8. Satisfactory completion of a doctoral examination concerning material in the major and minor fields; and
9. 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 (24) semester hours of course work while in residence during one 12-month period.

Combined Program Leading to a Doctor of Philosophy 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. Students may indicate their preference for the combined program to the graduate advisor. Acceptance will be by invitation of the faculty, and will occur between the student's second 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 in the History and Criticism of Art' and numbers 2–10 under sub-section 'Doctor of Philosophy in the History and Criticism of Art' above; sixty (60) semester hours of course work, plus twenty-four (24) semester hours of supervised dissertation research; eighty-four (84) semester hours total.

Certificate in Museum Studies

Graduate students in art history may earn a Certificate in Museum Studies in addition to their MA or PhD degree. The museum studies program is interdisciplinary and prepares students for professional work in museums and related institutions. In addition to fulfilling the requirements for the graduate degree, students complete two (2) core courses, two (2) electives, a six (6) semester hour internship, and a certificate project. Students are strongly encouraged to participate in regularly scheduled museum career activities.

Definition of Prefix

ARH — Art History

Graduate Courses

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 predynastic 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 periods 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). Begins with the first manifestations of Christian art and covers audiences, patrons, and problems of the representation of religious ideas. Arts discussed include Roman catacombs, mosaics of Ravenna and Sicily, sacred spaces of martyria and churches, icons of Rome and Constantinople, and late and luxurious court arts of Byzantium.

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 5240. Later Medieval Art (3). Generally called Gothic art, this course includes the cathedrals and their sculpture 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 Velázquez.

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 5425. 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 5440. 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 5527. West African Art and the Diaspora: Brazil, Haiti, the United States and Suriname (3). Course is intended to invest students with an appreciation for and an ability to identify and discuss the arts of 18th, 19th and 20th century West African societies. It will also examine the impact of those arts on the mind and spirits of Black populations in the Americas by giving students a framework for understanding how these arts work within social and cultural contexts.

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 5586. The Arts of Oceania, Africa and Native America (3). This course examines, discusses and analyzes the arts of peoples from Oceania, Africa and Native America. It provides students with a valid framework for understanding the complexities involved with these art forms from inside and outside specific social and cultural contexts.

ARH 5587. Arts and Architecture of Polynesia (3). This course is an in-depth introduction to the archaeology, art, architecture, ceremonies and cultures of island peoples. This includes Tonga, Western Samoa, American Samoa, Marquesas, Society, Cook, Austral and Hawaiian Islands, New Zealand, and Easter Island.

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 permission of instructor. This course familiarizes students with the literature in the history of U.S.art relevant to the period covered and the critical issues driving the field. Theme for the seminar varies.

ARH 5648. Art after 1940 (3). 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 5685. American and Ethnic Folk Art (3). This course is an introduction to American folk arts from the 17th, 18th, and early 19th centuries. Course is designed to provide students with a framework for understanding how folk arts worked within the social and cultural context of the time. It will also discuss the different ways folk arts have been defined, redefined, utilized, collected and understood by the art world at large.

ARH 5725. History of Graphics (3). A survey of artists and processes in western printmaking from woodcut to silk screen.

ARH 5795. Seminar in the Methods of Art History (3). Seminar in methodology required of art history graduate students.

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 5838. The Museum Object (3). Prerequisite: 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 5875. 20th-Century Feminist Art Criticism (3). Prerequisite: Graduate standing in art history, or permission of instructor. This course analyzes the questions raised by feminist artists and art critics in the U.S. since 1970 and their responses, based upon their philosophical and ideological stances as liberal, radical, cultural, materialist, or post-structuralist feminists.

ARH 5896r. Seminar in the History and Criticism of Art (3). May be repeated to a maximum of nine (9) semester hours.

ARH 5907r. Directed Individual Study (1–5). May be repeated to a maximum of nine (9) semester hours.

ARH 5913r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) semester hours may apply to a master's degree.

ARH 5940r. Supervised Teaching (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (9) semester hours.

ARH 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) 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 (9) 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 (9) 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 (9) 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 (9) 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 (9) 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 (9) semester hours.

ARH 6980r. Dissertation (1–12). (S/U grade only.)

ARH 8964r. Preliminary Doctoral Examination (0).

ARH 8967r. Master's Comprehensive Examination (0).

ARH 8976r. Master's Thesis Defense (0).

ARH 8985r. Dissertation Defense (0).

ASIAN HISTORY
see Asian Studies; Classical Languages, Literature, and Civilization; History-Asian History

Program in ASIAN STUDIES

College of Social Sciences

Director: Burton M. Atkins (Political Science); *Professors:* Bowman (Public Administration and Policy), Flanagan (Political Science), Kelsay (Religion), Lo (History), Olsen (Music), Ree (Modern Languages and Linguistics), Singh (History); *Associate Professors:* Bakan (Music), Erndl (Religion), Garretson (History), Ho (Anthropology), Kim (Political Science); *Assistant Professors:* Cuevas (Religion), Grant (History), Lan (Modern Languages and Linguistics); *Visiting Professor:* Koo (Economics); *Visiting Associate Professor*: Lopez (Religion); *Visiting Assistant Professor*: Lee (Art History)

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 course work prior to entering a PhD program in one of the disciplines represented by the participating Asian Studies faculty.

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 (33) semester hour course work program or a thirty (30) semester hour course and thesis program. Students selecting the first option will undergo comprehensive examinations on the course work 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 (6) of their required thirty (30) 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 course work below, so long as they take a minimum of eight (8) semester hours in history and six (6) semester hours each from the social science and arts and humanities tracks. Students however, are encouraged to concentrate their course work as much as possible to develop a particular country and language competence. Moreover, while it is required to take course work 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 (8) semester hours in the thirty-three (33) semester hour program or six (6) in the thirty (30) 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 master of arts degree by demonstrating a reading proficiency in Chinese, Japanese, Arabic, or some other approved Asian language through either: 1) the completion of twelve (12) semester hours of college level course work in the chosen Asian language with an average grade of at least 3.0 ("B"); 2) satisfactory performance on the Graduate School Foreign Language Tests of the Educational Testing Service; or 3) 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 further in their language training to gain an effective competency in their chosen area language. Up to nine (9) semester hours of language study beyond the initial twelve (12) semester hours can be counted towards 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.

Asian History

Minimum of eight (8) semester hours

ASH	5226	Modern Middle East (4)
ASH	5266	Central Asia Since the Mongols (4)
ASH	5406	China to 1898 (4)
ASH	5408	China Since 1898 (4)
ASH	5447	History of Modern Japan (4)
ASH	5529	Traditional India (4)
ASH	5559	Modern India (4)

Social Science Track

Minimum of six (6) semester hours

CPO	5036	Politics of Developing Areas (3)
CPO	5091	Core Seminar in Comparative Government and Politics (3)
CPO	5407	Seminar in Comparative Government and Politics: The Middle East (3)
CPO	5557	Seminar in Comparative Government and Politics: Japan (3)
CPO	5740	Comparative Political Economy (3)
ECO	5005	Economic Principles for International Affairs (3)
ECO	5705	International Trade (3)
ECO	5715	International Finance (3)
ECO	5936r	Special Topics [The Chinese Economy] (1–3)
ECS	5015	Economic Development: Theory and Problems (3)
GEA	5195r	Advanced Area Studies (3)
GEO	5465	Historical Geography (3)
GEO	5472	Political Geography (3)
GEO	5555	World Systems Theory (3)
INR	5036	International Political Economy (3)
INR	5037	Development, Dependence, and Inequality (3)
INR	5088	International Conflict (3)
INR	5275	Middle East Foreign Policy (3)
INR	5315	Foreign Policy Analysis (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)

Arts and Humanities Track

Minimum of six (6) semester hours

ANG	5255	Peasant Societies (3)
ANG	5491	Seminar in Social Anthropology [Peoples and Cultures of Southeast Asia] (3)
ANG	5491	Seminar in Social Anthropology [Japanese Society and Culture] (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	6592r	Topics in Eastern Art: Seminar (3)
CHI	4503	Readings in Chinese History (3)
CHI	5505r	Readings in Chinese Literature (3)
JPN	5900r	Studies in Japanese Language and Literature (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	5305r	Seminar: History of Religions (3)
REL	5326	Religions of the Ancient Near East (3)
REL	5339	Modern Hinduism (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 5906r. Directed Individual Study: Chinese Civilization (1–4). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

ASN 5907r. Directed Individual Study: Japanese Civilization (1–4). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

ASN 5910r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

ASN 5935r. Special Topics in Asian Studies (1–3). May be repeated as topics change.

ASN 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

ASN 8966r. Master's Comprehensive Examination (0).

ASN 8976r. Master's Thesis Defense (0).

ASTRONOMY
see Physics

BIOCHEMISTRY
see Biological Science; Chemistry and Biochemistry

Department of BIOLOGICAL SCIENCE

College of Arts and Sciences

Chair: Thomas M. Roberts; *Associate Chair (Graduate Studies):* Bates; *Associate Chair (Undergraduate Studies):*Reeves; *Associate Chair (Curriculum Development):* Elam; *Professors:* Abele, Anderson, Bates, Caspar, Elam, Ellington, Fajer, Freeman, Gaffney, Herrnkind, Hofer, James, Livingston, Mariscal, Meredith, Moerland, Outlaw, Quadagno, Roberts, Roux, Swofford, Taylor, Travis, Tschinkel; *Associate Professors:* Chase, Epstein, Hurt, L. Keller, T. Keller, Levitan, Miller, Reeves, Trombley, Winn; *Assistant Professors:* Bass, Erickson, D. Fadool, J. Fadool, Hansen, Houle, Inouye, Steppan, Underwood, Wulff; *Service Professor:* Easton; *Professors Emeriti:* Beidler, Collier, DeBusk, deKloet, Elliott, Friedmann, Heard, Homann, R. Johnson, Roeder, Short, Williams, Yerger

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. Every effort is made to provide both personal and professional support for qualified graduate students. The goal of such support is to facilitate progress toward the graduate degree while contributing to the teaching and research mission of the University.

The Department of Biological Science offers graduate programs leading to the degree of master of science or doctor of philosophy. There are strong graduate research programs in both systematic and experimental biology. Special research programs are available in biophysics and molecular biology; cell biology; biochemical and molecular genetics; microbial genetics; cytogenetics and evolution; developmental biology; microbiology; immunology; plant, animal, and microbial physiology; comparative physiology; reproductive physiology, endocrinology, and neuroendocrinology; sensory physiology; photobiology; plant and animal anatomy; invertebrate zoology; behavioral biology; population biology; marine biology; plant systematics and taxonomy; tropical biology; ecology and environmental biology; and microbial ecology. 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 Institute of Molecular Biophysics. 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 (Conradi, Biological Science 1, Biomedical Research Building, Molecular Biophysics, and Nuclear Research) and at The Florida State University Marine Laboratory, 45 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 electrophysiologal laboratories, instrumentation for photobiology, an isotope laboratory, photographic laboratories, and spectrophotometric instrumentation, as well as the National High Magnetic Field Laboratory and a supercomputer. Significant research collections of microorganisms and birds are maintained. 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 44 faculty members. The current faculty members hold contracts and grants totaling millions of dollars. The faculty is represented on the editorial boards of numerous professional journals and hold a number of national offices in professional societies. One member of the faculty has been elected to 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 made directly to the Office of Admissions. Application for financial aid should be made directly to the associate chair for graduate studies in the Department of Biological Science and must be submitted with all supporting documents by January 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, an 1100 on the Graduate Record Examination (GRE), with a minimum score of 500 on both the verbal and quantitative sections, three current letters of recommendation from individuals who are able to assess the applicant's academic and research potential, 250 word statement on research interest, and official transcripts. Foreign students, in addition to the above, must also score a minimum of 600 on the 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 $16,400 per calendar year; up to 20 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 (30) 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 [6] semester hours of thesis credit), eighteen (18) 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; and

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 areas follows:

1. After admission to doctoral candidacy, a minimum of twenty-four (24) 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; and

7. Successful defense of the dissertation.

For additional information, see *http://www.bio.fsu.edu/index-grad.htm*

Interdisciplinary Program in Neuroscience

Director: Robert J. Contreras

The program in neuroscience provides interdisciplinary training leading to the degree of doctor of philosophy in neuroscience. Participating faculty hold appointments in the Departments of Biological Science, Psychology, or Nutrition, Food and Exercise Sciences. Students enroll in the department of their initial faculty advisor/major professor but may take neuroscience courses offered by two or more of the participating departments. Several of the biological science faculty are members of the neuroscience program, with doctoral directive status for the neuroscience PhD (in addition to DDS for the biological science PhD).

Neuroscience courses offered through the Department of Biological Science include those with a PSB prefix. Interdisciplinary research training is available involving molecular, cellular, physiological and behavioral mechanisms in sensory biology (with special emphasis on chemical, auditory, visual and pain senses), synaptic physiology, learning and memory, neuroendocrinology/hormone-regulation, neural development and plasticity, neural control of food intake, neural control of reproductive behavior, circadian rhythms, cardiovascular regulation and the genetics of behavior. The program has two NIH funded training grants, 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 catalog and the program in neuroscience website at *http://www.neuro.fsu.edu.*

Definition of Prefixes

BCH — Biochemistry
BOT — Botany
BSC — Biological Science
MCB — Microbiology
PCB — Process Biology
PSB — Psychobiology and Neuroscience
ZOO — Zoology

Advanced Undergraduate Courses

Please refer to the *General Bulletin* for full course descriptions.

BOT	4373C.	Biology of Higher Plants (4).
BOT	4394.	Plant Molecular Biology (3).
BOT	4503.	Plant Physiology (3).
BOT	4503L.	Plant Physiology Laboratory (1).
BSC	4514.	Aquatic Pollution Biology (3).
BSC	4613.	Systematics (3).
BSC	4833C.	Radiation Biology (3).
MCB	4403.	Prokaryotic Biology (3).
MCB	4403L.	Prokaryotic Biology Laboratory (2).
MCB	4603.	Environmental Microbiology (3).
PCB	4024L.	Molecular Biology Laboratory (1).
PCB	4063Lr.	Experimental Genetics Laboratory (3).
PCB	4233.	Immunology (3).
PCB	4233L.	Laboratory in Immunology (1).
PCB	4253.	Animal Development (3).
PCB	4253L.	Animal Development Laboratory (1).
PCB	4514.	Advanced Genetics and Molecular Biology (3).
PCB	4674.	Evolution (3).
PCB	4723.	General and Comparative Animal Physiology (3).
PCB	4731L.	Experimental Physiology (2).
PCB	4843.	Fundamentals of Neuroscience (3).
ZOO	4204C.	Biology of Higher Marine Invertebrates (5).
ZOO	4232.	Parasitology (3).
ZOO	4232L.	Parasitology Lab (2).
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: Introductory biochemistry courses. May be repeated up to a maximum of four times or to a maximum of twelve (12) semester hours.

BCH 5887r. Special Topics in Biochemistry and Cell Biology (1–3). Prerequisite: Introductory biochemistry courses. May be repeated to a maximum of four times or to a maximum of twelve (12) semester hours.

Botany

BOT 5938r. Selected Topics in Botany (1–4). May be repeated to a maximum of sixteen (16) semester hours.

BOT 6936r. Seminar in Botany (2). (S/U grade only.) May be repeated to a maximum of eight (8) 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 5900r. Directed Individual Study (1–12). (S/U grade only.) May be repeated to a maximum of fifty (50) 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 (15) semester hours.

BSC 5936r. Selected Topics in Biological Science (1–4). May be repeated to a maximum of sixteen (16) semester hours.

BSC 5945r. Supervised Teaching (1–2). (S/U grade only.) May be repeated to a maximum of five (5) 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 (6) 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: Passage of preliminary examinations (BSC 8964r). Must register for dissertation research hours while working on dissertation. A minimum of twenty-four (24) semester hours of credit must be earned.

BSC 8964r. Preliminary Doctoral Examination (0). 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). 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). Oral defense of dissertation research. One-time registration during the term in which student expects to defend.

Microbiology

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 (16) semester hours.

MCB 6936r. Seminar in Microbiology (2). (S/U grade only.) To explore and investigate in detail a selected theme in microbiology. Typically the subject would be either a poorly understood one or be of much current significance. May be repeated to a maximum of eight (8) semester hours.

Process Biology

PCB 5047. Perspectives in Ecology and Evolutionary Biology (3). Lecture, discussion, and reading in advanced concepts of ecology and evolutionary 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 5345C. Advanced Field Biology (3). Emphasis on conducting a series of ecological research projects in the field.

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 the equivalent, or permission of the instructor. 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 (molecular biology) or instructor permission.Gene regulation and its relationship to differentiation and development.

PCB 5675. Advanced Evolutionary Biology (3). Prerequisites: PCB 3063, 4674 or equivalent or permission of instructor. 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 5746. Mammalian Physiology I (4). Prerequisites: BCH 4053, 4054 or equivalents; CHM 3210, 3211 or equivalents; PHY 3053C; or permission of instructor. This course facilitates an understanding of neurophysiological and neuroendocrinological mechanisms in mammals. It covers the principles of operation of neurons, neural circuits, neurohormones, and the nervous system as a whole.

PCB 5747. Mammalian Physiology II (4). Prerequisite: PCB 5746. Cardiovascular, respiratory, renal, and gastrointestinal physiology; endocrine physiology; metabolism.

PCB 5785. Biology of Muscle (3). Prerequisites: BCH 4053; 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: Mammalian physiology I or general physiology/cell biology background. Mechanisms of sensory transduction; higher level processing of sensory information; comparative aspects of sensory physiology.

PCB 5835. Neurophysiology (3). Prerequisite: Mammalian physiology I or general physiology/cell biology background. Membrane biophysics; molecular aspects of cell excitability; advanced cellular neurophysiology.

PCB 5846. Neurocytology and Neurochemistry (4). Morphological, molecular, developmental, and phylogenetic relations to nerve tissues.

PCB 5936r. Selected Topics in Genetics and Cell Biology (1–4). May be repeated to a maximum of sixteen (16) semester hours.

PCB 5937r. Selected Topics in Physiology (1–4). May be repeated to a maximum of sixteen (16) semester hours.

PCB 5938r. Selected Topics in Ecology and Evolutionary Biology (1–4). May be repeated in the same semester. May be repeated to a maximum of sixteen (16) semester hours.

PCB 6155C. Microscopy and Electron Microscopy for the Biologist (3). Permission of instructor required prior to registration.

PCB 6936r. Seminar in Genetics and Cell Biology (2). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

PCB 6937r. Seminar in Physiology (2). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

PCB 6938r. Seminar in Ecology and Evolutionary Biology (2). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

Neuroscience

PSB 5057. Neuroscience Methods: Molecules to Behavior (2). (S/U grade only.) This course exposes graduate students to a broad array of current techniques and methodologies in the neurosciences from a molecular to behavioral level of analysis.

PSB 5077. Responsible Conduct of Research (2). (S/U grade only.) This course is an introduction to survival skills and ethics in scientific research. The focus is on basic principles of scientific conduct and practice for graduate students pursuing careers in biomedical research.

PSB 5341. Systems and Behavioral Neuroscience (4). This course covers integrated neural systems that ultimately lead to the behavior of organisms. Topics include fluid and energy balance, reproduction, sleep, emotions, cognition and neurological disorders.

PSB 6070r. 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 (8) 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 (4) 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 (8) semester hours.

Zoology

ZOO 5932r. Selected Topics in Marine Biology (1–4). May be repeated to maximum of sixteen (16) semester hours.

ZOO 5935r. Selected Topics in Zoology (1–4). May be repeated to maximum of sixteen (16) semester hours.

ZOO 6933r. Seminar in Marine Biology (2). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

ZOO 6934r. Seminar in Zoology (2). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

BIOMEDICAL MATHEMATICS
see Mathematics

BOTANY
see Biological Science

CELL BIOLOGY
see Biological Science

Department of CHEMICAL ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Chair: Michael H. Peters; *Professors:* Humphries, Locke, Peters; *Associate Professors:* Alamo, Arce, Chella, Gibbs, Palanki, Telotte, Vinals; *Assistant Professors:* Kalu, Ma, Malvadkar, Wesson; *Visiting Assistant Professor:* Chin; *Adjunct Professor:* Schreiber; *Associate in Research:* Finney; *Affiliate Faculty:* Bertram, Chen, Garmestani, Gielesse, Haik

The Department of Chemical Engineering at the FAMU—FSU College of Engineering offers the degrees of doctor of philosophy and master of science in both chemical and biomedical engineering, and the bachelor of science degree in chemical engineering. The bachelor's degree is fully accredited by ABET. The department is strongly committed to continue 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 engineers that can handle challenging applications of the modern chemical industry. Fourteen full-time teaching faculty members, one adjunct teaching professor, and one research associate currently comprise the faculty.

Research areas include polymer processing, biochemical, biomedical, and electrochemical engineering, process control, materials research, macromolecular dynamics, environmental engineering, transport in porous and microstructured media, reaction kinetics, molecular transport phenomena, thermodynamics, NMR/MRI methods in transport, and engineering education. Many of these efforts are conducted in close cooperation with The Florida State University Institute of Molecular Biophysics (IMB), School of Computational Science and Information Technology (CSIT), National High Magnetic Field Laboratory (NHMFL), Center for Materials Research and Technology (MARTECH), 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.

The Department of Chemical Engineering's main office is located in the College of Engineering building at 2525 Pottsdamer Street. The mailing address is: *College of Engineering, Suite 131, 2525 Pottsdamer Street, Tallahassee, Florida, 32310–6046;* Phone: (850) 410-6149 or *410-6151*; Fax: *(850) 410-6150*; e-mail: *cheme@eng.fsu.edu*; website: *www.eng.fsu.edu/cheme*.

Research Facilities

The Department of Chemical 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, aerosol transport and deposition, batch process optimization and control operations, gas/liquid phase pollution treatment by non-thermal plasma, advanced fluid mechanics, and bioengineering.

A wide range of analytical equipment, including gas and liquid chromatographs, UV-Vis spectrophotometers, a chemiluminescence gas analyzer, aerosol particle measurement instrumentation, analytical microscopes, an FTIR spectrometer, potentiostats, a rotating disk electrode system, a hydraulic press for electrode fabrication, differential scanning calorimeters, and pH, conductivity, temperature, flow, pressure, mass and other measuring devices are located in these laboratories. 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 an autoclave, a controlled environment incubator, water polishing systems, refrigerated/heating circulating baths, isotemp ovens, high voltage power supplies, high purity gas production and mixing systems, a refrigerated centrifuge, a glassware cleaning device, and numerous additional support equipment.

In the area of computing capabilities, the department has numerous workstations, X-terms, and PCs interconnected to the colleges computing network. MATLAB, MATHCAD, CHEMCAD, and other UNIX and PC-based programs are readily available to graduate students in their computational research. Extensive, high level computing capabilities are available to students and faculty through The Florida State University Academic Computing and Network Service (FSU ACNS) and School of Computational Science and Information Technology (CSIT) through the College of Engineering network cluster. All students are given computer accounts allowing unlimited access to the Internet.

A new, large addition to the College of Engineering building was completed in the summer of 1998. It includes four new laboratories in the areas of biomedical engineering, process control, environmental engineering, and advanced materials. In addition, a large laboratory suite dedicated to nuclear magnetic resonance research includes a 500 MHz (12 Tesla) wide-bore, microimaging NMR spectrometer, and a larger bore, lower field NMR spectrometer for the study of larger scale biological samples.

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 the 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. The chemical engineer is employed in the manufacture of inorganic chemicals (i.e., acids, alkalis, pigments, fertilizers), organic chemicals (i.e., petrochemicals, polymers, fuels, propellants, pharmaceuticals, specialty chemicals), biological products (i.e., enzymes, vaccines, biochemicals, biofuels), foods, semiconductors, and paper.

Chemical engineers having graduate degrees work in a wide range of organizations where 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.

Master of Science

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 3.3 or higher, and a minimum combined score of 1800 on the verbal, quantitative, and analytical portions of the GRE;

4. International students: an undergraduate GPA of 3.3 or higher, a minimum combined score of 1800 on the verbal, quantitative, and analytical 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 550 on the paper version or 213 on the computerized version; and

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.

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 (6) semester hours of 4000-level course work approved by the department may be counted as graduate electives. Transfer credit from another institution is limited to six (6) 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 (4)
ECH	3101	Chemical Engineering Thermodynamics (3)
ECH	3266	Introductory Transport Phenomena (3)
ECH	3418	Separations Processes (3)
ECH	3854	Chemical Engineering Computations (3)
ECH	4267	Advanced Transport Phenomena (3)
ECH	4504	Kinetics and Reactor Design (3)

Additional courses in subjects including 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 Engineering offers both thesis-type and course-type (non-thesis) options leading to the master of science degree.

I. Thesis Option (thirty [30] semester hours)

The **thesis-type** master's degree is awarded upon successful completion of the following requirements:

1. Twelve (12) semester hours of chemical engineering core courses (see below);

2. Nine (9) semester hours of approved electives;

3. Nine (9) semester hours of ECH 5971r, Thesis; and

4. Registration and attendance at all departmental seminars.

No course with a grade below "C–" will be counted towards fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted towards fulfillment of degree requirements. The candidate must also complete and defend an original thesis.

Required Courses (twelve [12] 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)

II. Course (non-thesis) Option (thirty-three [33] semester hours)

The **course-type** master's degree is awarded upon successful completion of the following requirements:

1. Twelve (12) semester hours of chemical engineering core courses (see below);

2. Twenty-one (21) semester hours of approved electives; and

3. Registration and attendance at all departmental seminars.

No course with a grade below "C–" will be counted towards 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 candidate must also complete and present a special project. **Note:** departmental support is generally not available for students pursuing a non-thesis master's degree.

Required Courses (twelve [12] 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)

All chemical engineering 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 the safety training course.

Doctor of Philosophy

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 course work at the previous college or university attended (minimum GPA of 3.3); and

3. Demonstrated proficiency in conducting research in chemical engineering by passing the departmental PhD qualifying examination.

Degree Requirements

Before students can be admitted to the ChE doctoral program, they must satisfy the department's core course requirements for the master's degree and must pass the written 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.

The PhD degree will be awarded to a doctoral candidate upon successful completion of the following requirements:

1. Selection of a research topic and major professor(s);

2. Formation of a supervisory committee in consultation with the major professor(s);

3. Submission and defense of a prospectus on the dissertation topic to the supervisory committee;

4. Completion of thirty (30) semester hours of advanced course work (including twelve [12] semester hours of core course work);

5. Satisfaction of the University residency requirement;

6. Completion of twenty-four (24) semester hours of dissertation research (maximum credit);

7. Presentation and defense of an original dissertation;

8. One semester teaching assistantship in the undergraduate laboratory; and

9. Presentation of a research topic at one local, regional, or national professional meeting.

All chemical engineering 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 the safety training course.

Students with a master's degree in chemical engineering from the FAMU—FSU College of Engineering may, with approval of the graduate committee and major professor, take nine (9) additional approved semester hours beyond the thesis-type master's course requirements to satisfy the thirty (30) semester hour requirement for the PhD. All other requirements must be fulfilled as stated above.

Students with master's degrees in chemical engineering from other institutions will be given a specific course plan by the departmental graduate committee. A maximum of thirty (30) semester hours may be assigned to remedy any deficiencies in the student's background.

Qualifying Examination

All students admitted to the PhD program will be required to take the doctoral qualifying examination at the first offering after completion of the core course ECH 5052, Research Methods in Chemical Engineering. A research topic will be assigned by the graduate committee at the beginning of the semester. The student must write a research proposal and defend it orally in front of the graduate committee by the end of the semester. This examination must be passed within two consecutive attempts, or the student is not allowed to continue as a doctoral student. Upon successful completion of the qualifying examination, the student is admitted to candidacy for the PhD degree.

Program in Biomedical Engineering

Biomedical Engineering Program Director: Dr. Michael H. Peters

Recent 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 the bioengineering, biotechnology, and related professions.

The graduate program in biomedical engineering (BME) promotes a special emphasis in cellular and biomolecular transport processes with applications to drug delivery, tissue and cellular engineering, biosensors, bioseparations and artificial membrane/organ development, and biointerfacial engineering. Advanced engineering, medical, 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 in biomedical engineering will require thirty (30) semester hours for completion, with the PhD requiring a total of seventy-two (72) semester hours.

Master of Science

Admission Requirements

1. A baccalaureate degree in engineering, chemistry, physics, or biological sciences, or an allied field from an accredited college or university;

2. 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;

3. U.S. students: an undergraduate GPA of 3.3 or higher, and a minimum combined score of 1800 on the verbal, quantitative, and analytical portions of the GRE;

4. International students: an undergraduate GPA of 3.3 or higher, and a minimum combined score of 1800 on the verbal, quantitative, and analytical 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 550 on the paper version or 213 on the computerized version; and

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.

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: ECH 3023 Mass and Energy Balances; ECH 3101, Chemical Engineering Thermodynamics; ECH 3266, Introductory Transport Phenomena; ECH 3418, Separations Processes; and ECH 4267, Advanced Transport Phenomena; and, students also are required to complete mathematics through ordinary differential equations. In addition, students

should also have taken the following courses (if not included in their degree program) which are generally recommended for admission to medical school: Biological Sciences I and II, Genetics, Organic Chemistry I and II, Biochemistry I and II, Physical Chemistry I with lab, and General Psychology. An undergraduate course in anatomy and physiology is desirable but not required. **Note**: departmental financial support may not be available for graduate students taking a large number of undergraduate courses.

Degree Requirements

The Program in Biomedical Engineering offers both thesis-type and course-type (non-thesis) options for the master of science degree.

Thesis Option (thirty [30] semester hours)

The thesis-type master's degree is awarded upon successful completion of the following requirements:

1. Eighteen (18) semester hours of biomedical engineering core courses (see below);

2. Three (3) semester hours of approved electives;

3. Nine (9) semester hours of BME 5971r Thesis; and

4. Registration and attendance at all departmental seminars.

No courses with a grade below "C–" will be counted towards fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted towards fulfillment of degree requirements. The candidate must also complete and defend an original thesis.

Required Courses (eighteen [18] semester hours):

BME	5030	Biochemical Transport Phenomena I (3), **or** ECH 5261 Advanced Transport Phenomena (3)
BME	5937r	Special Topics in Biomedical Engineering [Quantitative Anatomy and Systems Physiology I and II] (3,3) if no credit given previously
BMS	6111C	Human Anatomy (5)
BMS	6510C	Mammalian Physiology I (4)
ECH	5052	Research Methods in Chemical Engineering (3)
ECH	5840	Advanced Chemical Engineering Mathematics I (3)

Biomedical Engineering Electives

Choose **one** of five (three [3] semester hours):

BME	5020	Biophysical Chemistry and Biothermodynamics (3)
BME	5105	Biomaterials (3)
BME	5385	Animal Surgical Techniques (3)
BME	5500	Biomedical Instrumentation (3)
BME	6330	Tissue Engineering (3)

Thesis Hours (nine [9] semester hours):

BME	5971r	Thesis (1–9)

In addition to the thirty (30) semester hours of coursework and thesis, an oral examination in defense of the thesis is required for the master's of science in biomedical engineering, thesis option.

II. Course (non-thesis) Option (thirty [30] semester hours)

The course-type (non-thesis) master's degree is awarded upon successful completion of the following requirements:

1. Eighteen (18) semester hours of biomedical engineering core courses (see below);

2. Twelve (12) semester hours of approved electives; and

3. Registration and attendance at all departmental seminars.

No courses with a grade below "C–" will be counted towards fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted towards fulfillment of degree requirements. The candidate must also complete and present a special project. **Note**: departmental support is generally not available for students pursuing a non-thesis master's degree.

Required Courses (eighteen [18] semester hours):

BME	5030	Biochemical Transport Phenomena (3) **or** ECH 5261 Advanced Transport Phenomena I (3)
BME	5937r	Special Topics in Biomedical Engineering [Quantitative Anatomy and Systems Physiology I and II] (3,3) if no credit given previously
BMS	6111C	Human Anatomy (5)
BMS	6510	Mammalian Physiology I (4)
ECH	5052	Research Methods in Chemical Engineering (3)
ECH	5840	Advanced Chemical Engineering Mathematics I (3)

Biomedical Engineering Electives

Choose **three** (nine [9] semester hours):

BME	5020	Biophysical Chemistry and Biothermodynamics (3)
BME	5105	Biomaterials (3)
BME	5385	Animal Surgical Techniques (3)
BME	5500	Biomedical Instrumentation (3)
BME	6330	Tissue Engineering (3)

DIS Project (3 hours):

BME	5905	Directed Individual Study (1–3)

Doctor of Philosophy

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 course work at the previous college or university attended (minimum GPA of 3.3); and

3. Demonstrated proficiency in the core areas of biomedical engineering by passing all sections of the departmental PhD qualifying examination.

Degree Requirements

Before students can be admitted to the doctoral program (PhD), they must satisfy the department's core course requirements for the master's degree and must pass the written 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 master's degree in biomedical engineering from the FAMU—FSU College of Engineering may, with approval of the graduate committee and major professor, take thirteen (13) additional approved semester hours beyond the master's requirements to satisfy the 30-hour course requirement for the PhD. All other requirements must be fulfilled as stated below.

Students with master's degrees in biomedical engineering from other institutions will be given a specific course plan by the departmental graduate committee. A maximum of thirty (30) semester hours may be assigned to remedy any deficiencies in the student's background.

Seventy-two (72) semester hours are required for the PhD degree in Biomedical Engineering, as follows:

Required Courses (eighteen [18] semester hours):

BME	5030	Biochemical Transport Phenomena (3) **or** ECH 5261 Advanced Transport Phenomena I (3)
BME	5937r	Special Topics in Biomedical Engineering [Quantitative Anatomy and Systems Physiology I and II] (3,3) if no credit given previously
BMS	6111C	Human Anatomy (5)
BMS	6510	Mammalian Physiology I (4)
ECH	5052	Research Methods in Chemical Engineering (3)
ECH	5840	Advanced Chemical Engineering Mathematics I (3)

Doctoral Biomedical Engineering Electives

Choose **four** of nine (twelve [12] semester hours)

Note: at least six (6) semester hours must be at the 6000-level (12 hours).

BME	5020	Biophysical Chemistry and Biothermodynamics (3)
BME	5105	Biomaterials (3)
BME	5385	Animal Surgical Techniques (3)
BME	5500	Biomedical Instrumentation (3)
BME	6210	Biomechanics of Human Structure and Motion (3)
BME	6330	Tissue Engineering (3)
BME	6530	NMR and MRI Methods in Biology and Medicine (3)
BME	6550	Computer Aided Design and Control in Medicine and Surgery (3)
BME	6720	Biostatistical Mechanics (3)

Medical Science Component (six [6] semester hours):

Two or more courses taught in the College of Medicine and approved by the students' major professor.

Dissertation Hours (thirty-six [36] semester hours):

BME 6980r Dissertation (1–9)

The following requirements for the PhD degree in biomedical engineering must be met:

1. Passage of the BME PhD qualifying examination within two consecutive exam attempts; this will result in formal admission to candidacy for the PhD degree;

2. Selection of a research topic and major professor;

3. Formation of a supervisory committee with at least two designated biomedical engineering or College of Medicine faculty members;

4. Submission and defense of a prospectus on the dissertation topic to the supervisory committee;

5. Completion of a minimum of thirty-six (36) semester hours of advanced course work in biomedical engineering and related disciplines. This course work includes the twenty-one (21) semester hours of courses under the MS thesis option program (see above). In addition, the thirty-six (36) semester hours of course work must include at least six course work hours at the 6000 level (see above);

6. Satisfaction of University residency requirements;

7. Completion of at least thirty-six (36) semester hours of dissertation research;

8. Presentation and defense of an original dissertation;

9. Assist in the teaching of at least one laboratory course; and

10. Presentation of one paper at a local, regional, national, or international professional meeting.

All biomedical engineering 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 the safety training course.

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 5935, 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 towards 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 master's directive status. The major professor is the chair of the supervisory committee. At least one other member of the committee must be from chemical engineering, biomedical engineering, or medicine; the third member of the committee may 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 five members with doctoral directive status, one of whom should have a primary appointment outside the department. After the members of the supervisory committee have been identified, the supervisory committee assignment form should be completed and returned to the departmental graduate coordinator. This form will be placed in the student's permanent file.

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 before the end of the second term. 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.

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 towards fulfilling the degree requirements. No grades below "C–" will be counted toward degree requirements. Students without an undergraduate degree in chemical 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 beginning of the Fall 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 must submit and defend a prospectus on the dissertation topic to the supervisory committee within a period of one year of admission to candidacy for the doctoral 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. 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 during their first year, when they will primarily be taking preparatory undergraduate chemical/biomedical engineering courses. 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 (RA's or TA's), 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 grade for classes. 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, but will typically require less than ten (10) hours per week.

Definition of Prefix

BME — Biomedical Engineering
ECH — Chemical Engineering

Graduate Courses

Biomedical Engineering

BME 5005. Engineering and Applied Science Aspects of Biology and Medicine (3). Prerequisites: BCH 4053; BSC 2010; ECH 4403; PCB 3063 and 3134, or 4024. An introductory biomedical engineering course that covers engineering aspects of biology and medicine, including cellular, tissue, and organ systems, physiology and pathophysiology, biomechanics, energetics of metabolism, and the systems engineering of physiological processes.

BME 5020. Biophysical Chemistry and Biothermodynamics (3). Prerequisites: CHM 4410, 4411; ECH 3101. This course examines engineering thermodynamics and physical chemistry of living systems, as well as biochemical pH monitoring and analysis.

BME 5030. Biochemical Transport Phenomena (3). Prerequisites: BCH 4053; BSC 2010; ECH 4403. This course examines the intercellular and intracellular transport of biochemical species, active and passive transport across cell membranes, facilitated transport, and enzyme kinetics and transport phenomena.

BME 5086. Biomedical Engineering Ethics (3). Prerequisite: Senior or graduate standing in Biomedical Engineering. This course is 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 through written work, class discussion and case analysis.

BME 5105. Biomaterials (3). Prerequisites: BCH 4053; BSC 2010; PCB 3063 and 3134, or 4024. This course examines the fundamentals and applications of biological materials, as well as tissue engineering and mechanics.

BME 5385. Animal Surgical Techniques (3). Prerequisites: BSC 2010, permission of instructor. This course examines animal surgical techniques, includinganimal anesthesiology, pre-op and post-op animal care.

BME 5500. Biomedical Instrumentation (3). Prerequisites: EEL 3003, 3003L. This course examines common instrumentation and analytical methodologies in medicine, lasers, optics, and electronics.

BME 5905r. Directed Individual Study (1–3). Prerequisite: consent of instructor. Detailed examination of some topic in biomedical engineering. Conducted on a personal basis with the instructor. May be repeated with different topics. A maximum of only three (3) semester hours can be used toward the MS or PhD. May be repeated to a maximum of twelve (12) semester hours.

BME 5910. Supervised Research (3). (S/U grade only.) Prerequisites: graduate standing in biomedical engineering and consent of instructor. 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: consent of instructor. Detailed study of some topic of special interest to biomedical engineers. May be repeated to a maximum of six (6) semester hours with different topics. May be repeated in same semester.

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 (6) semester hours can be counted toward the degree requirements. A minimum of six (6) hours is required. May be repeated to a maximum of twelve (12) semester hours.

BME 6210. Biomechanics of Human Structure and Motion (3). Prerequisite: Doctoral candidate in biomedical engineering. This course examines the theorectical mechanics applied to human structures.

BME 6330. Tissue Engineering (3). Prerequisite: Doctoral candidate in biomedical engineering. This course examines the fundamentals and applications of tissue engineering, tissue culturing and growth, and transplantation and rejection repression.

BME 6530. NMR and MRI Methods in Biology and Medicine (3). Prerequisite: Doctoral candidate in biomedical engineering. This course investigates MR imaging methods, spin echo methods, Bloch equations, proton diffusion, imaging, and microimaging NMR spectrometers in research.

BME 6550. Computer-Aided Design and Control in Medicine and Surgery (3). Prerequisite: Doctoral candidate in biomedical engineering. This course examines the fundamentals and applications of control and design in medicine and surgery, as well as computer controls in laser surgery.

BME 6720. Biostatistical Mechanics (3). Prerequisite: Doctoral candidate in biomedical engineering. This course investigates molecular construction of biological macromolecules, including proteins, DNA, and poly-glycolic compounds. It also examines molecular dynamics in membrane processes.

BME 6938r. Special Topics in Biomedical Engineering (3). Prerequisites: doctoral standing in biomedical engineering and consent of instructor. Detailed study of some topic of special interest to biomedical engineers. May be repeated to a maximum of six (6) semester hours with different topics. May be repeated in same semester.

BME 6980r. Dissertation (1–9). Prerequisite: doctoral standing 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 (24) semester hours.

BME 8965r. Doctoral Qualifying Exam (0). Prerequisite: doctoral standing 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). (S/U grade only.) Prerequisite: consent of instructor. All students must register for this course for the term during which they intend to defend their thesis.

BME 8985. Dissertation Defense (0). (S/U grade only.) Prerequisites: doctoral standing in biomedical engineering and consent of instructor. This course must be included in the final semester schedule for all doctoral students.

Chemical Engineering

ECH 5052. Research Methods in Chemical Engineering (3). Prerequisites: chemical engineering. 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 5128 Advanced Chemical Engineering Thermodynamics II (3). Prerequisite: ECH 5126. Introduction to the basic aspects of nonequilibrium thermodynamics and nonequilibrium statistical mechanics for graduate students. Special emphasis is given to the understanding of the microscopic mechanisms that govern macroscopic transport.

ECH 5261. Advanced Transport Phenomena I (3). Prerequisite: ECH 5842 or permission of instructor. 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 5263r. Special Topics in Transport Phenomena (3). Prerequisite: ECH 5261. Selected topics in momentum, heat, or mass transfer. Course content varies with instructor and term taught. May be repeated to a maximum of nine (9) semester hours with different topics.

ECH 5325. Advanced Process Control (3). Prerequisite: ECH 4323 or equivalent. Development of modern concepts in automated control theory. Analysis of the state space theory of linear systems. Controllability, observability, and stability of linear systems. Design of state feedback and state estimators. Introduction to nonlinear systems analysis, and use of differential geometry to develop analogs of linear systems theory in nonlinear systems.

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 5626. Chemical Process Optimization (3). Prerequisite: ECH 4323 or equivalent. This course examines the development of techniques for unconstrained minimization of multivarate functions. Numerical techniques include steepest descent, Newton's Methods, Quasi-Newton's Methods, and conjugate-gradient methods. Topics include introduction to linear and nonlinear programming, simplex method, duality in linear programming, Lagrange multiplier method, Kuhn-Tucker theorems, penalty function and augmented Lagrangian methods.

ECH 5784. Chemical Engineering Environmental (3). Prerequisites: ECH 4403 or equivalent, ECH 4504 or equivalent. Introduction to applications of environmental engineering from a chemical engineering perspective. Thermodynamics, stoichiometry, chemical kinetics, transport phenomena, and physical chemistry are utilized in addressing pollution control and prevention processes. Analysis of particle phenomena including aerosols and colloids. Applications of fundamentals to analyze gas and liquid waste treatment processes.

ECH 5828. Introduction to Polymer Science and Engineering (3). Corequisites: ECH 5126, 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, 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, Fouier series, Integral (Fouier and Laplace) transforms, boundary value problems.

ECH 5841. Advanced Chemical Engineering Mathmatics II (3). Prerequisite: ECH5840. 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 interpoation 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: Consent of instructor. Detailed examination of some topic in chemical engineering. Conducted on a personal basis with the instructor. May be repeated with different topics. Only three (3) semester hours may be used toward the MS degree.

ECH 5910. Supervised Research (3). (S/U grade only.) Prerequisite: Consent of instructor. Performance of research project required for the nonthesis MS degree.

ECH 5934r. Special Topics in Chemical Engineering (3). Prerequisite: Consent of instructor. 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 (6) 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 (6) hours can be counted towards degree requirements. A minimum of six (6) semester hours is required.

ECH 6127. Phase Equilibria (3). Prerequisites: ECH 3101, 5126. Detailed development of equilibrium and stability conditions. Application of these concepts to calculation of equilibrium states. Modern methods of measurement and correlation of phase equilibrium data.

ECH 6272. Molecular Transport Phenomena (3). Prerequisite: Graduate standing. 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 6283. Microrheology (3). Prerequisites: ECH 5261. Rigorous molecular and micromolecular transport mechanics applied to the study of flow phenomena of complex and composite (polymeric, colloidal, and biological) fluids, with an emphasis on the micro-rheological concept.

ECH 6506. Chemical Engineering Kinetics (3). Prerequisites: MAP 3305, CHM 4411, ECH 4403. Mass action systems in gases and liquids; complex reaction networks; collision and transport theory; rate parameters; activated complex theory. Computational modeling of reaction systems, coupled reaction, and transport.

ECH 6536. Surface Science and Catalysis (3). Prerequisite: Graduate standing in chemical engineering. Fundamental theoretical and experimental studies of the physical and chemical processes on the solid surface. Characterization and morphology of the surface using state of the art techniques. Reaction dynamics and chemical reactivity. Molecular dynamics of gas-surface reactions. Chemical synthesis pathways using molecular mechanic and statistical mechanic approaches. Role of quantum mechanics on the prediction of a catalytic complex.

ECH 6848. Operator-Theoretic Methods in Engineering Sciences (3). Prerequisite: ECH 5842. Introduction to the spectral theory of linear self-adjoint and non-self-adjoint operators in Hilbert spaces with special emphasis on problems related to engineering sciences. Applications cover homogeneous and composite systems, and heat, momentum, and mass transport in mixtures of single and multicomponent systems with and without chemical reaction.

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 (24) hours can be applied to the doctoral degree.

ECH 8965r. Doctoral Preliminary Exam (0). (S/U grade only.) All doctoral students must enroll in this course the semester they intend to take the qualifying exam.

ECH 8976. Thesis Defense (0). (S/U grade only.) Prerequisites: ECH 5126, 5261, 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). (S/U 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

Chair: S.A. Safron; *Professors:* Cioslowski, Crow, Dalal, Dougherty, Fulton, Manousakis, Marshall, Rikvold, Safron, Van Winkle, von Molnar; *Associate Professors:* Hilinski, Lind; *Assistant Professors:* Alabugin, Cao, Steinbock, Xiong

The departments of Chemistry and Biochemistry and Physics offer interdepartmental doctor of philosophy and master of science 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 cooperating 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 **School of Computational Science and Information Technology (CSIT)**, which was begun only a few years ago at The Florida State University, has as 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 CSIT; their research interests generally involve developing computational techniques for the new supercomputers 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, most of the latest 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 both MARTECH and CSIT. Additional research facilities have also become available as the new National High Magnetic Field Laboratory has come into operation.

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 course work 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 degree is offered. The candidate must earn at least sixteen (16) semester hours of credit at the 5000 level or above and, of these sixteen (16), at least six (6) must be in formal lecture courses in either physics or chemistry. A minimum of six (6) 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 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, chemical dynamics/kinetics, and quantum mechanics. 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) and one special topics in physics course (PHY 6938r) approved by the student's supervisory committee. The physical chemistry cumulative exams are based primarily on the courses CHM 5460–5461 and CHM 5480–5481;

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 (6) 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

Chair: Naresh S. Dalal; *Professors:* Allen, Cioslowski, Clark, Cross, Dalal, Dorsey, Dougherty, Fulton, Gilmer, Holton, Krafft, Light, Marshall, Safron, Saltiel, Schlenoff, Schwartz, Vickers; *Associate Professors:* Blaber, Chapman, Cooper, Goldsby, Hilinski, Logan, Stiegman; *Assistant Professors:* Alabugin, Dudley, Greenbaum, Li, Sang, Steinbock, Weston; *University Professor:* Kasha; *Coordinator of General Chemistry Laboratories:* Pulliam; *Coordinator of Upper Division Chemistry Laboratories:* Ward; *Professors Emeriti:* Choppin, DeTar, Herz, Johnsen, Leffler, Linder, Mandelkern, Mellon, Rhodes, Sheline; *Professor Emerita:* Hoffman

The graduate program in chemistry and biochemistry at The 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 and doctor of philosophy degrees in analytical, inorganic, organic, physical, and biochemistry. Interdisciplinary programs leading to advanced degrees in chemical physics and 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 laboratory facilities and the presence of up-to-date University facilities, such as the School of **Computational Science and Information Technology** 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 building and Molecular Biophysics building. Several adjacent structures serve other department teaching functions. 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 who provide assistance and technical guidance in the use of each facility operate these laboratories. The **Laser Laboratory** is a multiuser research facility allowing access to a variety of sophisticated lasers, spectrometers, detectors and data acquisition setups to allow research involving lasers. The facility is well equipped to carry out Raman vibrational spectroscopy using continuous wave lasers, laser-induced emission spectroscopy with the use of continuous wave and high energy pulsed lasers, and transient absorption measurements with high energy pulsed lasers. The **Mass Spectrometry Laboratory** has the ability to obtain low-, medium- and high-resolution mass spectra using electron impact, chemical ionization or electrospray ionization. Molecular spectra are acquired on a JEOL JMS-600H double focusing high resolution mass spectrometer or Agilent 6870/5873 GC-MS combination. 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 seven Fourier Transform NMR spectrometers, along with considerable test equipment. Spectrometers currently housed in this facility include an Inova500 (500 MHz for protons) Varian spectrometer dedicated to high resolution NMR, Inova300 (300 MHz) dedicated to the undergraduate chemistry laboratories, Gemini 2000 (300 MHz), Bruker AC 300 (300 MHz), WP200SY (200 MHz) IBM/Bruker spectrometer with a 'solids' accessory, WP270SY (270 MHz) spectrometer used primarily for the observation of high resolution heteronuclear NMR and biological *in vivo* NMR spectroscopy, and the newest addition, a Varian 600 MHz wide-bore spectrometer devoted to biological and materials science applications. The **Biochemical Synthesis and Services Laboratory** (BASS) staff 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 a Multi-Angle Laser Light Scattering (MALLS) and X-ray fluorescence spectrometer for multi-element analyses of liquids and solids. 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, photo, and woodworking shops in support of teaching and research activities.

With an active faculty of nearly 40 members, the department offers a fully developed program, encompassing theoretical and experimental research in all areas of chemistry and many interdisciplinary areas. The faculty has been widely recognized for achievements with memberships 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 Award in Chemical Instrumentation, the American Chemical Society Award in Polymer Chemistry, the American Chemical Society Fisher Award in Analytical Chemistry, the American Chemical Society Award in Nuclear Chemistry, the Chemical Manufacturing Association award for excellence in chemical education, Presidential Young Investigator awards, Sloan Fellowships, National Institutes of Health career development awards, and numerous regional and local awards for both research and teaching. For additional information see the departmental website at: *http://chemweb.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 and thesis- and course-type master of science programs. Each requires a student to identify one of the five divisions of the department—analytical, biochemistry, inorganic, organic, or physical—as an area of specialization. Requirements for course work and exams differ among divisions. 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 divisional requirements for each degree program, is available from the student affairs office of the Department of Chemistry and Biochemistry and on the website.

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) which 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 adviser 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 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. Some divisions require the student to take a written comprehensive examination in the area of concentration after completing the required course work. 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 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 (21) of the University-required thirty-two (32) semester hours of credit must be taken on a letter-grade basis at the 4000 level or above. At least three (3) hours of directed individual study (DIS) must be taken. A supervisory committee must be formed to guide the student.

The student must choose an area of concentration by taking at least twelve (12) hours of formal course work and passing a comprehensive exam in a division.

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 course work. Students must give at least one seminar in the area of their concentration.

Requirements for the Doctor of Philosophy Degree

The heart of the PhD degree is research. The degree is granted to students who have mastered a definite 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 the division in which they will concentrate and 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. In the analytical, organic, inorganic, and physical divisions, the written portion of the preliminary examination consists of a series of "cumulative" exams on selected topics, a designated number of which must be passed in a prescribed period. The biochemistry division uses a single "comprehensive" exam offered once or twice a year. The oral portion consists of an examination covering a research proposal. It must be taken within six months after completion of the written portion.

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
CHM — Chemistry
CHS — Chemistry—Specialized

Graduate Courses

Analytical Chemistry

CHM 5086. Environmental Chemistry I (3). The application of geologic 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, including radon and asbestos; geologic hazards in upland and coastal areas; 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. Organic geochemistry of natural waters and sediments. An overview of the sources of organic matter in aquatic systems, the important reactions and transport mechanisms which 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 and capillary electrophoresis 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). Lecture. 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 5141. Introduction to Chemometrics (3). Lecture. The application of techniques of linear algebra and statistics to enhance the selectivity of chemical analyses. The Fourier transform and signal processing, orthogonalization, classical least-squares, inverse least-squares, partial least-squares, factor analysis, principal components regression, analysis of variance, response surfaces and models, signal enhancement.

CHM 5151. Optical Methods of Chemical Analysis (3). Lecture. 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). Lecture. Instrumentation and techniques in electrochemistry, including such topics as electrode processes, potentiometry, voltammertry, and coulometry.

CHM 5154. Chemical Separations (3). Lecture. 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 physiochemical parameters.

CHM 5180r. Special Topics in Analytical Chemistry (1–3). Lecture, as appropriate to credit. May be repeated up to a maximum of four times.

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 suffienct introductory material in polymer synthesis to relate structure and properties.

CHM 6190r. Analytical Chemistry Seminar (1). May be repeated to a maximum of six (6) semester hours.

CHM 6191r. Analytical Chemistry Seminar (1). (S/U grade only.) May be repeated to a maximum of six (6) semester hours.

Biochemistry

BCH 5405. Molecular Biology (3). Prerequisite: Introductory biochemistry or consent of instructor. 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 5886r–5887r. Special Topics in Biochemistry and Cell Biology (one to three [1–3] hours each). Each course may be repeated to a maximum of twelve (12) semester hours or a total of four times.

BCH 6896r. Biochemistry Seminar (1). May be repeated to a maximum of six (6) semester hours.

BCH 6897r. Biochemistry Seminar (1). (S/U grade only.) May be repeated to a maximum of six (6) semester hours.

CHM 5506. Physical Chemistry of Macromolecules I (3). Prerequisite: Two semesters of physical chemistry or consent of instructor. 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 consent of instructor. 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 5620. Principles of Inorganic Chemistry (3). Lecture. Prerequisite: CHM 4610 or an appropriate upper-level undergraduate inorganic course. Descriptive chemistry, including main group elements and organometallic chemistry.

CHM 5640. Current Problems in Inorganic Chemistry (2). Lecture, three (3) hours per week for 10 weeks. Special topics in inorganic 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 (9) semester hours.

CHM 5681r. Current Topics in Inorganic Chemistry (1–3). Group theory and physical methods. May be repeated to a maximum of nine (9) semester hours.

CHM 6690r. Inorganic Chemistry Seminar (1). May be repeated to a maximum of six (6) semester hours.

CHM 6691r. Inorganic Chemistry Seminar (1). (S/U grade only.) May be repeated to a maximum of six (6) semester hours.

Organic Chemistry

CHM 5225. Advanced Organic Chemistry—Structure (3). Lecture. Advanced description of structural stereochemistry, stereochemical aspects of reactions, theoretical aspects of structure.

CHM 5226. Advanced Organic Chemistry—Reactions (3). Lecture. An advanced treatment of reactions of importance in organic syntheses.

CHM 5245. Physical Organic Chemistry (3). Lecture. 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). Lecture, as appropriate to credit. May be repeated to a maximum of four times.

CHM 6390r. Organic Chemistry Seminar (1). (S/U grade only.) May be repeated to a maximum of six (6) 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 5460. Thermodynamics and Statistical Mechanics (3). Lecture. Fundamentals of thermodynamics and basic concepts of quantum and classical statistical mechanics; thermodynamic functions from spectroscopic data; 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). Lecture. 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). Lecture. 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 consent of instructor. 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 Biochemistry.

CHM 5507. Physical Chemistry of Macromolecules II (3). Prerequisites: Two semesters of physical chemistry or consent of instructor. 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 Biochemistry.

CHM 5530. Survey of Physical Chemistry (3). Lecture, three (3) hours; help session, one (1) hour. An intense survey of physical chemistry covering the areas of thermodynamics, statistical mechanics, quantum mechanics, and chemical kinetics. The course emphasizes the application of mathematical methods in treating physical quantities. Restricted to beginning graduate students in chemistry.

CHM 5580r–5581r. Special Topics in Physical Chemistry (one to three [1–3] hours each). Lecture as appropriate. Each course may be repeated to a maximum of four times.

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 (6) semester hours.

Multiple Area Courses

CHM 5823r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) hours may be applied to a master's degree. May be repeated to a maximum of five (5) semester hours.

CHM 5830r–5833r. Directed Individual Study (one to six [1–6] hours each). (S/U grade only.) Each course may be repeated to a maximum of thirty (30) semester hours.

CHM 5910–5913. Chemical Research (three [3] hours each).

CHM 5935r. Chemistry Seminars (0). (S/U grade only.) May be repeated to a maximum of 10 times.

CHM 5940r. Supervised Teaching (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 The 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 (6) semester hours credit is required.

CHM 6850r-6851r. Techniques in Research (three [3] hours each). (S/U grade only.) Each course may be repeated to a maximun of six (6) semester hours.

CHM 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours is required.

CHM 8966r. Master's Comprehensive Examination (0). (S/U grade only.)

CHM 8969r. Preliminary Doctoral Examination (0). (S/U grade only.)

CHM 8976r. Master's Thesis Defense (0). (S/U grade only.)

CHM 8985r. Dissertation Defense (0). (S/U grade only.)

CHEMISTRY: SPECIALIZED
see Chemistry

CHILD DEVELOPMENT
see Family and Child Sciences

CHINESE
see Asian Studies; Modern Languages and Linguistics

CIVIL CONSTRUCTION ENGINEERING
see Civil and Environmental Engineering

Department of CIVIL AND ENVIRONMENTAL ENGINEERING

FAMU—FSU College of Engineering

Chair: J. W. Wekezer; *Professors:* Dzurik, Hall, Nnaji, Ping, Tawfiq,Yazdani; *Associate Professors:* Leszczynska, Mtenga, Sobanjo, Spainhour; *Assistant Professors:* Abdel Razig, Abdullah, Abichou, Chan Hilton, Huang, Mussa

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, coastal construction, structural stability, and structural reliability; geotechnical, pavements, and soil dynamics; transportation networks and multimodal system; and computer-aided design and decision support as well as the integration of physical and numerical models of civil engineering systems. In environmental engineering, the focus is on hydraulics, hydrology, groundwater, water resources, and the management of all waste systems.

Laboratories

The college has many instructional and research laboratories. Specific laboratories for the Department of Civil and Evironmental Engineering are geotechnical, environmental, hydraulic, pavement, construction materials, and structures.

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 undergaduate teaching lab and a graduate research lab. The facilities include equipment and instrumentation needed for physical and chemical 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 systerm.

A structures lab two stories high, has a three-foot reinforced concrete reaction slab with 100 kips 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 being equipped with state-of-the-art vertical and lateral loading systems, together with automated data acquisition systems.

The department is developing a corrosion research laboratory, the central component of which is a computer controlled corrosion monitoring system, which is capable of accelerating corrosion, measuring corrosion rate, and estimating corrosion potential. The department also has an infrared camera for non-destructive evaluation (NDE) of structures. This equipment is used to investigate the deterioration of structures and the effectiveness of various repair techniques.

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 postprocesssing. 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 connnection to the NSF v BNS network. Desktop computers are supported by a cluster of Sun, DEC, and SGI servers. Other nearby resources include the School of Computational Science and Information Technology (CSIT), FSU Academic Computing and Network Services (ACNS), and FAMU Computing Services.

Other resources include a small collection of reference works and heavily used books and journals which are a part of 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 Engineering (ASCE); and the Engineering Honor Society, Tau Beta Pi.

Master's Admission Requirements

Admission requirements for the MS program include the following:

1. A baccalaureate degree in civil engineering, or an allied academic disipline, from an accredited college or university. International students must have a BS 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 [60] semester 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); and

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 on the regular test or 213 on the computer based test.

Doctoral Admission Requirements

Admission requirements for the PhD degree include the following:

1. An 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;

4. A minimum score of 550 or 213 on the computer based version on the Test of English as a Foreign Language (TOEFL) if their native language is not English;

5. Three (3) letters of recommendation;

6. An essay of intent stating goals and reasons for pursuing the PhD degree; and

7. An interview by the Graduate Committee or its representatives.

Master's Degree Requirements

The thesis option requires twenty-four (24) semester hours of course work and six (6) semester hours of thesis work. A nonthesis option requires thirty (30) semester hours of course work and three (3) semester hours of independent research or advanced design project work. Both options require a final oral examination in which the stu-

dent defends a thesis or project. The general course requirements include 12–15 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. A maximum of six (6) semester hours of graduate course work, 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 (50%)of the student's course work. Each individual program is designed with the approval of a major advisor and a supervisory committee. The general course requirements for both options are given below.

Course Distribution	Thesis	Non-thesis
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	3
Graduate Seminar	0	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 sucessful defense of a thesis or project report. All of the above requirements must be met within seven (7) 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 (9) 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 prior to this time, a professor approved by the graduate committee chair will act as the student's academic advisor. The major professor is formally appointed by the department chair and will serve as chair of the supervisory committee. The supervisory committee is formally appointed by the department chair at the request of the major professor. There must be a minimum of three 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 chairperson.

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 (9) hours in a student's area of concentration, nine (9) semester hours beyond the master's degree in supporting courses, nine (9) semester hours in a non-departmental minor area and twenty-four (24) 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
Area of concentration	9	9
Support courses	9	9
Minor courses	9	9
Dissertation	24	24
Graduate Seminar	0	0
Total credit hours for the PhD 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 (30) 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 (24) graduate semester hours in any period of twelve (12) consecutive months.

Following completion of a major portion of the course work 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 towards mastery of a sub-discipline; and, has 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 course work 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 students who fails re-examination is dismissed from the program. Upon successful completion of the doctoral preliminary examination, students may 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 course work 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 (7) 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 20 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 website to learn more more about individual faculty research. The department chairman should be contacted about prospects of teaching assistantships. For other financial and scholorship opportunities contact FAMU at *(850) 599-3730* or e-mail at *finaid@famu.edu*, or FSU at *(850) 644-5716* or email at *finaid@admin.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, Tallahassee, Florida 32310-6046,* Telephone: *(850) 410-6136.*

Definition of Prefixes

CCE — Construction Engineering
CEG — Civil Engineering
CES — Civil Engineering: Structures
CGN — Civil Engineering
CWR — Civil Water Resources
EGN — General Engineering
ENV — Environmental Engineering
TTE — Transportation and Traffic Engineering

Graduate Courses

Construction Engineering

CCE 5035. Construction Planning and Scheduling (3). Prerequisite: CCE 4004. Planning, basic arrow diagraming, basic precedence diagraming, 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; 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 5065. Soil Dynamics (3). Prerequisite: CEG 3011. Involves the study of soil behavior under different types of loading conditions, propagation of stress waves in elastic media, determination of dynamic soil properties, soil liquification and liquification potential, and analyzing foundation systems subjected to dynamic loads.

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 subbases for highways and airports; geotechnical considerations.

CEG 5415. Groundwater, Seepage, and Drainage (3). Unconfined and confined groundwater flow analysis utilizing complex variables, conformal mapping, and elliptical functions, mapping techniques, flow and seepage from canals and ditches, seepage toward wells, effect of seepage on structural foundations, foundation dewatering, and pavement drainage.

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; EGN 3331. 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, stress concentrations, plastic deformation and fracture.

CES 5106r. Advanced Structural Analysis (3). Prerequisites: CES 3100; EGN 3331. Review of matrix algebra. Direct stiffness method for truss analysis. Computer applications. Statically indeterminate structures. Slope-deflection and moment distribution methods. Computer modeling of structures. Case studies and projects. May be repeated to a maximum of six (6) semester hours.

CES 5144. Matrix Methods for Structural Analysis (3). Prerequisites: CEG 3011; CES 4101; MAP 3305. Selected fundamental techniques, including energy methods, for the formalization of the stiffness method for structural analysis. Formation of element matrices, transformed element matrices, structure stiffness matrices, and equations of equilibrium. Selected solution techniques for mainframe computers and microcomputers.

CES 5209. Structural Dynamics (3). Prerequisites: CES 4101; EGN 3321; and MAP 3305. Analysis and design of single- and multi-degree-of-freedom structures subjected to various types of excitations and initial conditions. Computational aspects of dynamic analysis, including approximate methods of analysis. Introduction to earthquake loading and design.

CES 5218. Fundamentals of Structural Stability Theory (3). Prerequisites: CES 4101, 5106 or EGN 3331. Elastic and inelastic buckling of columns including large deformation theory and imperfect columns, torsional buckling, beam column theory, buckling of frames. Methods of analysis include the formation and solution to differential equations, energy methods, and matrix methods. AISC stability design curves will be used with LRFD format. Educational stability software will also be used as a teaching aid.

CES 5325. Bridge Engineering (3). Prerequisites: CES 4605, 4702. Introduction to design of modern steel and concrete highway bridges. Materials and properties. Load on bridges. Substructure design.

CES 5585. Earthquake/Wind Engineering (3). Prerequisites: CES 4101; MAP 3305. Fundamentals of structured dynamics. Earthquake and wind loading. Response of undamped and damped single/multi degree-of-freedom structures subjected to earthquake or wind dynamics loadings. Response spectra. Fourier analysis and frequency domain.

CES 5606. Advanced Steel Design (3). Prerequisites: CES 4605; EGN 3331. Behavior of complex steel elements and structures. Analysis and design of columns and beams under combined effects of flexure, shear and torsion. Lateral torsional buckling. Plastic design. Design of frames.

CES 5706. Advanced Reinforced Concrete Design (3). Prerequisites: CES 4101, 4702; EGN 3331. Behavior of advanced reinforced concrete structures. Analysis and design for torsion; slender columns; two-way slabs; retaining walls; shear walls; deep beams. Art of detailing. Strut-and-tie method.

CES 5715. Prestressed Concrete (3). Prerequisites: CES 4101, 4702; EGN 3331. Behavior and design of prestressed concrete structures. Beam design for flexure and shear, loss of prestress. Design of slabs and axially loaded members, precast construction.

CES 5845. Composites in Civil Engineering (3). Prerequisites: CCE 3101; CES 3100; EGN 3331. Fundamental theories of composite materials; forms of composites and their reinforcements; physical, chemical, and mechanical properties; design and testing methods; civil engineering applications of composite materials.

CES 6116. Finite Elements in Structures (3). Prerequisite: CES 4101. Boundary conditions, computer techniques and structurally finite elements for trusses, beams, beams on an elastic foundation, frames and plane stress, and plane strains in triangular elements. Engineering modeling.

Hydraulic/Water Resources Engineering

CWR 5125. Groundwater Hydrology (3). Prerequisites: CWR 3201; 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, 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). Prerequisites: CEG 2202C; CWR 3201; EES 3040. Corequisites: 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 5515. Physical Models of Hydraulic Systems (3). Prerequisites: CWR 3201, 3201L; MAP 3305. Classical techniques of dimensional analysis and similitude are presented for hydraulic problems; operational physical model will be constructed and used to solve a practical engineering problem.

CWR 5516. Numerical Models in Hydraulics (3). Prerequisites: CWR 3201, 3201L, MAP 3305. Numerical approaches including finite element techniques used in hydrology and hydraulics are presented and applied to simple engineering case studies.

CWR 5635. Water Resources Planning and Management (3). Prerequisites: CWR 4101, 4202. Quantity and quality planning of water resources systems. Economic considerations.

CWR 5824. Coastal and Estuarine Hydraulics (3). Prerequisites: CWR 3201; 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. Corequisite: CWR 4202 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 5045. Environmental Systems Analysis (3). Prerequisite: ENV 4001. 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. 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 5504. Environmental Engineering Processes and Operations (3). Prerequisite: ENV 4001 or consent of instructor. 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, 3201L; EES 3040, 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: ENV 4001, 4001L. 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 modelling.

TTE 5526. Airport Planning and Design (3). Prerequisites: EGN 2212; TTE 3004, 5006. Design planning of new airports and redesign of existing airports; relationships of the airport and the surrounding community.

TTE 5805. Highway Geometric Design (3). Prerequisites: CEG 2202, 2202L; TTE 3004. Principles and procedures for the geometric design of highways and streets; considerations of traffic, land use, and aesthetic factors.

Other Courses

CGN 5315. Probabilistic Design in Civil Engineering (3). Prerequisites: A department approved course in statistics. Review of traditional civil engineering design methodology; identify uncertainties, construct probability models of random design parameters; incorporate uncertainty into the design of selected civil engineering systems.

CGN 5905r. Directed Individual Study (1–6). (S/U grade only.) May be repeated to a maximum of six (6) semester hours when topics change.

CGN 5910r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximim of five (5) semester hours and a maximum of three (3) 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 (6) semester hours. Consult instructor.

CGN 5931r. Special Topics in Civil Engineering (1–6). Special topics in civil engineering with emphasis on recent developments. Contents and credits will vary. May be repeated to a maximum of six (6) semester credit hours. Consult instructor.

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 75% 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 (6) 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 (6) credit hours may be applied towards the master's degree. May not be repeated for more than six (6) semester credit hours.

CGN 5974r. Master's Project (3). (S/U grade only.) A master's project representing three (3) semester hours of academic work is a requirement for the MS degree with the nonthesis 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). (S/U 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 (24) 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 towards completion. May be repeated as often as approved by the supervisory committee. A maximum of twenty-four (24) semester hours may be applied towards the PhD degree.

CGN 8985r. Dissertation Defense (0). (S/U 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). (S/U 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 Classical Languages, Literature, and Civilization; History

Department of CLASSICAL LANGUAGES, LITERATURE, AND CIVILIZATION

College of Arts and Sciences

Chair: W. Jeffrey Tatum; *Professors*: de Grummond, Glenn, Golden, Tatum; *Associate Professors:* Pfaff, Pullen, Sickinger; *Assistant Professors:* Fulkerson, Slaveva-Griffin, Stoddard; *Emeritus Faculty:* Plescia, Thompson; *Visiting Professor:* Cairns

The influence of art, languages, literatures and cultures of the Greco-Roman world pervades every western and many non-western societies; modern America is no exception. A meaningful appreciation of our classical past is vital both for understanding the impressive continuity of western institutions and values as well as for recognizing how recent innovations and transformations of received assumptions have rendered aspects of the classical world alien and sometimes exceptionable. The classics are crucial both to the perpetuation and to the critique of the western liberal arts education.

The Department of Classical Languages, Literature and Civilization 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 interdisciplinarity 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. Individual faculty members have also won numerous competitive grants. The department boasts special strengths in ancient literary criticism, the archaeology of Greece and Italy, the political and social history of Athens and of Rome, and Roman religion.

The department enjoys a close relationship with other departments in the University, especially art history, philosophy and religion, each of which offers graduate level courses of interest to classicists. The department is also associated with the Program in the Humanities, which offers an interdisciplinary course of study leading to the PhD in the intellectual history of the classical world.

Each student works closely with a major professor and the director of graduate studies to design a graduate program which meets that student's specific personal and professional requirements.

Admission Requirements

The minimal admission requirements for all programs leading to the MA are:

1. A BA degree;

2. A 3.0 undergraduate grade point average (GPA) in all upper-division work or a minimum of 1000 on the aptitude test of the Graduate Record Examination (GRE); and

3. Sufficient undergraduate work in classics to warrant study on the graduate level.

The minimal requirements for admission to the doctoral program are:

1. An MA degree (students holding the BA who wish to pursue doctoral work in the department should first apply to the MA program);

2. A GRE score of not less than 1200 (with not less than 600 on the verbal section); and

3. A 3.5 GPA in previous graduate level course work.

Master of Arts 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. The department cooperates with the foreign language education program in the University in order to help future teachers to meet state certification requirements.

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:

1. Completing twelve (12) semester hours of college level work with a grade point average of 3.0 or above;

2. Earning a 480 or above on the appropriate examination in the Graduate School Foreign Language Tests administered by ETS; or

3. 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. No more than three (3) semester hours at the 4000 level will count toward any MA degree.

All students 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 exams or thesis 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 urged to select a major professor by the conclusion of their first year (the selection is not irrevocable). Comprehensive and translation exams will ordinarily be given during one week of each term: in the fall term, it will be the second week in November; in the spring term, it will be the week following the spring break.

Students are expected to familiarize themselves with University regulations concerning required forms and deadlines

Master of Arts with a Major in Classical Archaeology

The program in classical archaeology allows a student to focus his or her course work 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.

Requirements for Course Option

Required Courses	Required Hours
CLA 5936	1
CLA 5789r	4
Seminars (usually CLA 5799)	6
CLA 5910	3
Archaeology courses	9
Electives in classics	9
Comprehensive examination	0

Students who choose the course option are required to write a substantial research paper (usually an expanded version of a seminar paper) during the semester in which they are registered for CLA 5910.

Requirements for Thesis Option

Required Courses	Required Hours
CLA 5936	1
CLA 5789r	4
Seminars (usually CLA 5799)	6
CLA 5971r	6
Archaeology courses	9
Electives in classics	6
Comprehensive examination	0
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.

See below for a description of comprehensive examinations.

Master of Arts with a Major in Greek and Latin

The program in classics (Greek and Latin) enables a student to concentrate his or her course work 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

Required Courses	Required Hours
CLA 5936	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 (may be at 4000 level)	3
Electives in classics	8
Translation examination	0

Requirements for Thesis Option

Required Courses	Required Hours
CLA 5936	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 (may be at 4000 level)	3
CLA 5971	6
Translation examination	0
Thesis Defense	0

See below for a description of the translation examinations.

Master of Art in Latin

The program in Latin enables the student to concentrate his or her course work 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 course work 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

Required Courses	Required Hours
CLA 5936	1
Six courses at the 5000 (or 6000) level in Latin	18
One history course	3
One archaeology course (may be at 4000 level)	3
Electives in classics	8
Translation examination	0

Requirements for Thesis Option

Required Courses	Required Hours
CLA 5936	1
Six courses at the 5000 (or 6000) level in Latin	18
One history course	3
One archaeology course (may be at 4000 level)	3
LNW 5971	6
Translation examination	0
Thesis Defense	0

See below for a description of the translation examinations.

Master of Art in Greek

The program in Greek enables the student to concentrate his or her course work on that language. Students hoping to proceed to doctoral-level work should also have some course work 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

Required Courses	Required Hours
CLA 5936	1
Five courses at the 5000 (or 6000) level in Greek	15
One history course	3
One archaeology course (may be at 4000 level)	3
Electives in classics	11
Translation examination	0

Requirements for Thesis Option

Required Courses	Required Hours
CLA 5936	1
Five courses at the 5000 (or 6000) level in Greek	15
One history course	3
One archaeology course (may be at 4000 level)	3
GRW 5971	6
Electives in classics	3
Translation examination	0
Thesis Defense	0

See below for a description of translation examinations.

Master of Arts 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). This program may be taken under the course option or the thesis option. The department recommends the course option.

Requirements for Course Option

Required Courses	Required Hours
CLA 5936	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 (may be at 4000 level)	3
Electives in classics	17

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.

Requirements for Thesis Option

Required Courses	Required Hours
CLA 5936	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 (may be at 4000 level)	3
CLA 5971	6
Electives in Classics	9
Thesis Defense	0

Comprehensive Examinations for Classical Archaeology

The comprehensive exam in classical archaeology is divided into two parts:

1. Two hours of identifications:

   a) 25 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.

   b) 25 terms (out of a selection of 35). Study lists of terms can be obtained from the Director of Graduate Studies.

2. Two hours of essays:

   a) Select one essay from either the Bronze Age or Hellenic period.

   b) Select one essay from either the Etruscan or Roman period.

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.

Translation Examinations for Classics, Latin or Greek

Students seeking an MA in Classics, Latin or Greek will sit a two hour translation examination. Passages will be representative of a student's previous course work. 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.

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 (all in the relevant language), a student will translate four passages; two in prose and two 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 who wish to pursue doctoral-level work in the department should first apply to the MA program. The PhD requires thirty (30) semester hours of course work beyond the MA, at least twelve (12) semester hours of which must be at the 6000 level. 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 examina-

tions 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
GRE — Greek (Language Study)
GRW — 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 prehistoric culture in Crete and Greece.

ARH 5119. Archaeology of Ancient Egypt (3). Survey of the archaeology and art of Ancient Egypt from the Predynastic 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 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 (6) semester hours.

ARH 5934r. Tutorial in Classical Archaeology (1–3). Prerequisite: Instructor's consent. 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 (9) 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 (24) semester hours.

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 (6) 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 (6) semester hours.

CLA 5789r. Classical Archaeology: Fieldwork (1–6). Excavation experience through The Florida State University Field School at Cetamura, Italy. May be repeated to a maximum of twelve (12) 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 (6) semester hours.

CLA 5885. Roman Law (3). Detailed study of the principles and procedures of Roman Law.

CLA 5905r. Directed Individual Study (1–4). May be repeated to a maximum of nine (9) semester hours.

CLA 5910r. Supervised Research (1–3). (S/U grade only.) May be repeated to a maximum of three (3) 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 (3) 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 (6) semester hours.

CLA 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

CLA 6980r. Dissertation (1–12). (S/U grade only.) Prerequisite: CLA 8964r.

CLA 8961r. Master's Comprehensive Examination (0).

CLA 8964r. Preliminary Doctoral Examination (0). (S/U grade only.)

CLA 8985r. Dissertation Defense (0). (S/U grade only.) Prerequisites: CLA 6980r, 8964r.

CLA 8976r. Master's Thesis Defense (0).

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 (6) semester hours.

CLT 5385r. Studies in Ancient Comedy and Satire (3). Reading and analysis of selected works in English translation revealing the movements in Greek and Roman comedy, Roman satire, and ancient prose fiction. May be repeated to a maximum of six (6) semester hours.

EUH 5406. Hellenic History (3). History of Greece from the beginning to Alexander the Great. Emphasis on the social and political structures of Sparta and Athens.

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.

GRE 5069r. Graduate Reading Knowledge Examination (0). (S/U grade only.)

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 (6) 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 (6) 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 (6) 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 (6) semester hours.

GRW 5908r. Directed Individual Study (1–4). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

GRW 5909r. Tutorial in Greek (1–3). Prerequisite: Instructors consent. 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 (9) semester hours.

GRW 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

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 (24) semester hours.

GRW 8966r. Master's Comprehensive Examination (0).

GRW 8976r. Master's Thesis Defense (0).

LAT 5069r. 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 (6) 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 (6) 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 (6) 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 (6) 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 (6) semester hours.

LNW 5908r. Directed Individual Study (1–4). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

LNW 5932r. Tutorial in Latin (1–3). Prerequisite: Instructors consent. 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 (9) semester hours.

LNW 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours of credit is required.

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 (24) semester hours.

LNW 8966r. Master's Comprehensive Examination (0).

LNW 8976r. Master's Thesis Defense (0).

CLASSICAL LITERATURE IN TRANSLATION
see Classical Languages, Literature, and Civilization

CLINICAL PSYCHOLOGY
see Psychology

Institute for COGNITIVE SCIENCES

College of Arts and Sciences

Acting Director: L.J. Kohout, Department of Computer Science

Certificate in Cognitive Science

This certificate recognizes interdisciplinary study encompassing linguistics, computer science, philosophy, and psychology. Cognitive science encompasses human cognitive processes, such as knowledge representation, inference, memory, planning, problem solving, language, vision, as well as the modeling of these processes on computers. The premise is that comparison of machine models and analogues of cognitive processes with human and animal behavior, together with a study of the philosophical implications, will lead to deeper understanding as well as more useful applications in the component fields.

The program is open to students admitted to any graduate program at The Florida State University, although 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 of Cognitive Science, 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. In addition, the student must attend the cognitive sciences colloquium for credit for two regular semesters. 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 course work may vary from eleven (11) to more than seventeen (17) 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)644-2413* or at *105C Love Building; Department of Computer Science, Florida State University, Tallahassee, FL 32306-4530;* e-mail: *kohout@cs.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)

Department of COMMUNICATION

College of Communication

Chair: Stephen D. McDowell; *Professors:* Heald, Mayo, Sapolsky, Young; *Associate Professors:* Adams, Jordan, MacNamara, McDowell, Montgomery, Nudd, Payne, Pekurny, Pompper, Rackley, Rayburn, Ungurait; *Assistant Professors:* Houck, McClung, Opel, Pashupati, Raney; *Visiting Assistant Professor:* Arpan; *Associate in Communication:* Solomon; *Assistants in Communication:* Halvorson, Lindsay, Posnansky, Rodin, Zeigler; *Associate Scholar/Scientist:* Grise; *Professors Emeriti:* King, Minnick, Phifer, Wotring

The Department of Communication has among the largest and most diversified graduate degree programs in communication in the country. The department 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 mass communication, or in the emerging areas of interactive and new communication technologies, there are a variety of courses and course sequences available.

Specifically, at the master's level, programs of study are offered in communication with an emphasis in interactive and new communication technologies; integrated marketing and management communication; mass communication; and political communication and rhetoric. At the doctoral level, programs of study are available in speech communication, mass communication, and communication theory and research.

Both thesis and nonthesis master's options are available. Some nonthesis 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. The faculty from the Department of Communication has been elected, and continues to serve, as officers in major academic societies and professional associations. Faculty members have been and remain prominent in the 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.

Applications and Admissions

1. The candidate should obtain an application form from the University Graduate Admissions Office **and** a departmental application form and letter of instructions from the department. These are also available at *http://www.comm.fsu.edu*. The applicant should submit the completed forms with supporting documents to each respective office. The department will accept new graduate students for **Fall and Spring semesters.**

2. **Minimum** criteria to be considered for admission to the master's program include a GPA of 3.0 (on a 4.0 scale) for the last two years of undergraduate work and a Graduate Record Examination (GRE) score (verbal plus quantitative) of at least 1000. Minimum criteria to be considered for admission to the doctoral program include a GPA of 3.3 for the master's, a 3.0 for the last two years of undergraduate work, **and** a GRE score of 1000. All applicants must submit three letters of recommendation and completed University and departmental application forms. **Note:** the master's and doctoral programs are highly competitive and admission may require more than the minimum GRE and GPA.

3. All applicants for the doctoral program must complete an interview with the graduate admissions 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 Department of Communication at The 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.

Foreign students are required to submit GRE scores and a Test of English as a Foreign Language (TOEFL) score. Regardless of TOEFL scores, some foreign 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 no matter what degrees have been earned in their home countries. If a foreign student has earned an English competency, some of these requirements may be waived.

Master's Degree

Supervisory Committee and Program of Studies

1. Prior to or during registration for the first semester, students should meet with the coordinator for their emphasis area. The coordinator will help the student plan course work for the first semester.

2. 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 department's director of graduate studies, 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.

3. No later than the end of the first semester, the student must submit a program of studies to the committee for approval. The program must closely follow the guidelines of the selected major and must meet departmental and University requirements. The program should be prefaced by a statement from the student specifying: a) professional goals, b) current status toward achieving each goal, and c) courses and/or experiences completed. The proposed program of studies 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 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 (6) semester hours may be transferred from another graduate institution and then only with the approval of the supervisory committee. Not more than six (6) 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 (6) hours of letter-graded 4000 level work may be counted in the master's program. 4000 level courses taken on an S/U basis may not be counted, nor may any work below the 4000 level.

The program of studies must be approved by all committee members, the department chair, the director of graduate studies, and the dean of the college. The student should provide signed copies to all signatories, with the chair's copy filed in the student's department folder. Changes in the program of studies or in the composition of the supervisory committee are accomplished with special forms obtained from the chair or director of graduate studies. The forms are signed by all committee members, the department chair, director of graduate studies, and the dean and are attached to the student's original program of studies.

4. A master's program normally requires the equivalent of one and one-half calendar years of full-time course work. Students with weak backgrounds in their chosen area of specialization, or with degrees outside of communication, should expect to spend longer to complete a master's program.

5. 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.

6. There is no University-wide residency requirement.

7. Each master's candidate must demonstrate, by term papers or thesis, writing skills that are acceptable to the student's committee.

8. The English proficiency of domestic and foreign 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.

9. There is no department-wide foreign language requirement. If the student wishes to receive the master of arts degree, the University requires: a) Proficency in a foreign language demonstrated by satisfactory performance on the Graduate School Foreign Langauge Tests of the Educational Testing Service, or certification by the appropriate language department, or completion of twelve (12) 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 (6) 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.

10. Depending on the major area in which the student is enrolled, the student may elect a thesis or nonthesis program. To qualify for the master's degree under the thesis program, the student must complete a minimum of thirty-three (33) semester hours including six (6) hours of thesis credit. At least twenty-four (24) of those hours must be taken on a letter-grade basis.

To qualify for the master's degree under the nonthesis program, the student must complete a minimum of thirty-three (33) semester hours (or thirty-six [36] semester hours with comprehensive exams), twenty-seven (27) 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 nonthesis 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.

A one-week testing window for master's comprehensive examinations is offered each 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 (43) semester hours maximum including thesis. Any hours taken beyond forty-three (43) 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 course work.

11. A prospectus must be approved by all committee members prior to serious research or data collection for a thesis project. Signed copies are to be filed in the student's department and college folders.

12. During registration for the final semester the student should enroll in either 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.

Non-thesis students may be required to take a written comprehensive examination as required in the major area or determined by the supervisory committee. During the first part of the semester, the student should meet with the supervisory committee to determine the nature and content of the examination and to set dates for both written and oral portions.

13. The manuscript and final clearance adviser in the Office of Graduate Studies must approve the form of the thesis before final typing. 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.*

14. 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 departmental 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.

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.

The major professor will bring to the oral examination the departmental graduate exam clearance form which is to be signed by all committee members and by the departmental chair.

15. 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 three copies of the thesis, or an electronic copy where applicable. Notice the submission deadline published in the *Registration Guide*. It is courteous to give all members of the committee and the department copies of the thesis. The Strozier Library sends the major professor one copy.

Master's Degree Programs

Master's Degree in Communication with an Emphasis in Interactive and New Communication Technologies

Career Goals. This program is designed as a terminal degree for graduate students who are interested in mastering the domain of interactive communication leading to employment in professional positions in a wide range of public and private sectors. Upon completion of the program each graduate will be at least minimally competent in managing the development of digital communication solutions and products, as well as be familiar with major digital applications implementing multimedia. Through courses and experiences, our program offers an understanding of the theory and processes which involve interactive communication, especially in relation to the application of digital media and technologies in organizational, educational and marketing communication contexts. This preparation includes: systematic planning and evaluation for management responsibility in corporate or agency communications; information architecture and connectivity infrastructure; education, training and research for public and private agencies; and social, political and cultural impact of interactive communication. This master's degree is intended to provide technical training in media software, and instruction in strategic communication, digital-content development, training, information access and research.

Educational Goals. The student will follow a course of study providing: 1) comprehensive literacy of new interactive communication technologies; 2) grounding in the theories of communication with particular emphasis on those that apply to new communication technologies, along with exposure to the most recent theories of computer-mediated communication; 3) preparation for professional careers in new communications technologies; 4) application of relevant theories to the design of interactive products and utilization of current and available software and hardware components; and 5) specialization in the creative, research, or business component of the interactive communication industry. This includes system and marketing communications planning, budgeting, personnel management, instructional design and program evaluation.

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; selected software applications (e.g., multimedia authoring and media integration, electronic imaging, animation, data-based authoring software, education and training), design, production and evaluation of interactive programs and products; new media advertising/marketing research, development, design and evaluation; application of research methods to new communication technologies including historical/critical, experimental, survey, content analysis, and data analysis; computer-mediated communication research skills and tools; and systems thinking and planning.

Required Hours. Thirty-three (33) semester hours **as a minimum** are required. All students will be expected to have a fundamental understanding of basic interactive software techniques, and incoming students may be required to take a preparatory course on applications software. 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 nine (6–9) 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 (33) semester hours.

For specific course requirements, visit the departmental website at *http://www.comm.fsu.edu* or contact the department.

Master's Degree in Communication with an Emphasis in Integrated Marketing and Management Communication

Career Goals. This program is designed as a terminal master's degree for graduate students who are interested in professional positions emphasizing corporate communication, organizational change, or information management within a variety of settings, including business, government or educational institutions. This master's degree focuses on organizational communication, system planning, strategic communication, management, and research.

Educational Goals. The student will follow a course of studies providing: 1) grounding in the theories of communication with particular emphasis on those that apply to organizational communication and new communication technologies along with exposure to the most recent theories of computer-mediated communication; 2) preparation for professional careers with the use of new communication technologies as a management and public relations tool; 3) audience research techniques and technologies; and 4) specialization in the creative, research or business component in the utilization of interactive communications within organizations. This may include system and marketing communications planning, budgeting, personnel management, instructional design and program evaluation.

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: organizational communication including performance-based management, internal and external public relations, regulation and policy; traditional and new media advertising/marketing/public relations research, development, design and evaluation; application of research methods to organizational communication including historical/critical, experimental, survey, content analysis, focus group, audience research and data analysis; computer-mediated communication research skills and tools; systems planning and thinking.

Required Hours. Thirty-three (33) semester hours **as a minimum** are required; thirty-six (36) semester hours are required with comprehensive exams. All students will be expected to have a fundamental understanding of basic interactive software techniques. 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 nine (6–9) 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 (33) semester hours (nor the thirty-six [36] semester hours with comprehensive exams.)

For specific course requirements, visit the departmental website at *http://www.comm.fsu.edu* or contact the department.

Master's Degree in Communication with an Emphasis in Mass Communication

Career Goals. This program is designed for graduate students who are interested in studying the mass media. The program may result in a terminal degree, leading to a position in a media organization. The program may also serve as preparation for a doctoral degree in mass communication, leading to a teaching or research position. By the conclusion of the master's program, students will have been introduced to media research methods and tools, theories and content pertaining to media communication processes and effects, mass media regulation and policy, and other topics.

Educational Goals. The student will follow a course of study providing: 1) grounding in mass communication theory; 2) training in research methods applicable to the study of mass communication processes and effects; 3) an understanding of the content and changing role of mass media and other information technologies; and 4) analysis of the social and psychological effects of media content and contexts.

Areas of Special Knowledge and Skills to be Developed. Depending on career path and specific course of study, the amount of coursework within each of the following areas will vary: communication theory and processes; survey, content analysis, focus group, and experimental research methods; audience research; computer analysis and interpretation of quantitative data; and research on the effects of mass media messages, technologies, and institutions.

Required Hours. Thirty-three (33) semester hours **as a minimum** are required; thirty-six (36) semester hours are required with comprehensive exams. 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 nine (6–9) 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 (33) semester hours.

For specific course requirements, visit the departmental website at *http://www.comm.fsu.edu* or contact the department.

Master's Degree in Communication with an Emphasis in Political Communication and Rhetoric

Career Goals. This program is designed to support students seeking a terminal master's degree and those planning to continue on to the doctoral program. By the conclusion of the master's program, students will have been introduced to research methods and analytic tools, and the theoretical and historical background of political communication and rhetorical analysis. Graduates will be prepared to work in both the academic and the professional environment.

Educational Goals. The student will follow a course of study providing: 1) description, evaluation, synthesis and application of political communication and rhetorical theories including small group, persuasive, public address, organizational and mass communication; 2) qualitative and quantitative research methods; and 3) data-analytic techniques and computer applications.

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: research methods including historical/critical, experimental, survey and content analysis; data analysis; use of microcomputers; and critical and analytic skills.

Required Hours. Thirty-three (33) semester hours **as a minimum** are required. Students who have completed insufficient coursework in communication at the undergraduate level (e.g., students who did not major in a communication-related area) may be required to take six to nine (6–9) 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 (33) semester hours.

For specific course requirements, visit the departmental website at *http://www.comm.fsu.edu* or contact the department.

PhD in Communication

Supervisory Committee and Program of Studies

1. Prior to or during registration for the first semester, students should meet with their provisional adviser. This provisional adviser will help the student plan course work for the first semester.

2. As early as the end of the first semester and no later than the middle of the second semester a major professor will be appointed. This will usually be a specialist in the student's major area. It is the student's responsibility, after consultation with the Director of Graduate Studies, to secure consent of an eligible faculty member to serve as the major professor.

A doctoral supervisory committee must be appointed by the middle of the second semester. The members of this committee will be decided by mutual agreement among the student, the major professor, prospective committee members individually, and the department chair. PhD committees in the Department of Communication have four to five members, all of whom must have master's directive status and three of whom must hold doctoral directive status. One member must be from a different department. This outside member must hold doctoral directive status and is the representative-at-large who reports directly to the Dean of the College of Communication and the Dean of Graduate Studies. This doctoral supervisory committee approves the program of studies, reviews and approves any proposed revisions, designs and evaluates the doctoral preliminary examination, and supervises and approves the dissertation.

3. Within a month after appointment of the doctoral supervisory committee, but no later than the end of the second semester, the student must submit a program of studies to the committee for approval. The program must closely follow guidelines for the selected doctoral major and must meet departmental and University requirements. The program of studies should be prefaced by a statement from the student specifying: a) professional goals, b) current status toward achieving each goal, and c) courses and/or experiences completed or proposed to achieve each goal. This statement and the proposed program of studies should be developed with the help and advice of the major professor and submitted to all committee members at least five days before the committee meets. At the meeting, the committee will discuss and modify the program as necessary.

All doctoral students are required to have five (5) semester hours of either supervised teaching or research. Credit for supervised creative work may be substituted for supervised research. A maximum of five (5) hours of supervised teaching or research is allowed.

During the first year of study all doctoral students are required to enroll in the following foundation courses: COM 5401, 5312, 5316, 5331, and 5340.

Each major specifies research tool courses. The doctoral supervisory committee will recommend that the student attain a mastery of whatever research tools are appropriate to the dissertation. Mastery of research tools must be certified by the doctoral supervisory committee before submission of the prospectus. The research tool requirement must consist of a minimum of four courses (letter-grade type) beyond the department foundation courses.

The program of studies must be approved by all committee members, the department chair, the director of graduate studies, and the dean. The student should provide signed copies to all signatories, with the chair's copy filed in the student's department folder. Changes in the program must be initialed on both departmental and college file copies by all committee members, the department chair, the director of graduate studies, the dean, and the student.

4. A doctoral program including dissertation normally requires the equivalent of three calendar years of full-time course work beyond the master's degree. Students with weak backgrounds in their chosen area of specialization, or with a degree outside communication, should expect to spend longer to complete a doctoral program.

5. 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 PhD work.

6. All doctoral students must be continuously enrolled on the University campus or in one of its centers for a minimum of twenty-four (24) semester hours credit during one academic year. The academic year is defined as enrollment in any period of 12 consecutive months.

7. Every doctoral student is required to submit an original scholarly paper to an appropriate journal and/or a state, regional, or national convention. The original paper must be approved by the student's doctoral supervisory committee before the preliminary examination to meet this requirement.

8. The English proficiency of domestic and foreign 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.

9. There is no department-wide foreign language requirement.

10. The department's graduate policy committee will assess the progress of each first-year doctoral student at the end of the spring semester. During the second and successive years, each doctoral student's progress will be reviewed annually by the committee. Copies of the review will be available to the student, the doctoral supervisory committee, the department chair, and the dean.

11. When students are enrolled in their last semester of course work, and before the prospectus is submitted for approval, the student will enroll for COM 8964 and take the doctoral preliminary examination. Preliminary examinations may not be taken if the student has one or more incomplete grades and/or more than twelve (12) semester hours of unfinished course work. The department chair must certify that students are eligible for preliminary examination before the examination is administered.

The doctoral preliminary examination is designed, administered, and evaluated by the doctoral supervisory committee, with assistance from other faculty members in the department, as appropriate. The examination will consist of at least twelve (12) semester hours of written examination in the major field and collateral areas.

During the first part of the last semester, the student should meet with the committee to determine the nature and content of the examination and to set dates for both the written and oral portion. The oral portion of the doctoral preliminary examination should occur at least one week but not more than two weeks following submission of the written portion to committee members. The oral portion should be scheduled prior to the last two weeks of classes in any given semester. At least one week prior to the examination, the candidate is responsible for notifying all departmental faculty of the date, time, and place of the oral examination. The candidate is responsible for scheduling the oral defense at a time that is convenient for all committee members.

12. Upon successful completion of the oral defense of the doctoral preliminary examination, the student may elect to reconstitute the supervisory committee. The newly formed committee will direct the student through the prospectus, dissertation, and dissertation defense. Formation of the reconstituted committee must follow all guidelines for supervisory committees (see 2 above).

13. Students must register for a minimum of twenty-four (24) semester hours of dissertation credit (COM 6980r) and must enroll for some credit during each semester when substantial work is done on the dissertation, whether on or off campus. The student will not normally enroll for dissertation hours until the semester following the completion of preliminary examinations. Students may not in any case enroll for dissertation credit before the semester in which they take doctoral preliminary examination (COM 8964) and receive satisfactory grades in these preliminary examinations, and they may not enroll for dissertation hours until after a passing grade is recorded for COM 8964.

14. A student who has successfully completed the doctoral preliminary examination is considered a candidate for the doctoral degree. This must occur at least six months prior to the granting of the degree.

15. 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.

16. A prospectus must be approved by all committee members prior to serious research or data collection for a dissertation. Signed copies are to be filed in the student's department and college folders.

17. At registration for the final semester, the student should enroll in COM 8985, dissertation defense. At the same time, the student should make application for graduation and the diploma.

18. The manuscript and final clearance adviser in the Office of Graduate Studies must approve the form of the dissertation before the final typing. The student should consult with this adviser early in the preparation stage and obtain a copy of *Guidelines and Requirements for Electronic Thesis, Treatise, and Dissertation Writers.*

19. Prior to the oral defense of the dissertation, an announcement must be sent to *The Week of*, published by the Office of Graduate Studies and Research. 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 departmental 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.

The defense should be scheduled at least two weeks after copies of the dissertation have been distributed to committee members. These must be seen by the candidate and the major professor as final copies.

The major professor will bring to the oral examination the departmental graduate exam clearance form, which is to be signed by all committee members and by the departmental chair.

20. At the office of permanent records, evaluation, and graduation, the candidate will receive a final term degree clearance form, which provides spaces for certification by all parties concerned that all requirements for the degree have been met. After the oral defense, the doctoral candidate must submit to the manuscript and final clearance adviser this completed form and three copies of the dissertation or an electronic copy. It is courteous to give all members of the committee and department copies of the dissertation. The Strozier Library sends the major professor one copy.

PhD Degree Programs

Minimum Required Hours: the typical doctoral program will require a minimum of ninety (90) graduate semester hours. This will include twenty-four (24) semester hours for the dissertation.

Required Cognate: an outside cognate of twelve (12) semester hours approved by the doctoral supervisory committee is required.

Teaching/Research: students must complete five (5) 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 (5) 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 course work.

For specific course requirements, visit the website at *http://www.comm.fsu.edu* or contact the department.

Communication Theory and Research

Career Goals: teaching and research positions within a graduate program in an academic institution. Senior research position in public agency or management/marketing research firm.

Additional Educational Goals: training in the construction, evaluation, and revision of theories in communication.

Areas of Special Knowledge: knowledge of existing theories in communication, structure and philosophy of theory, quantitative and qualitative research methods, statistical and computer applications.

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 microcomputing. 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.

Assistantships/Scholarships

The Department of Communication offers teaching and research assistantships to doctoral students, and 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.

In addition to University Fellowships, the College of Communication offers the college-wide Teaching Fellowship, which is awarded annually.

Definition of Prefixes

ADV — Advertising
COM — Communication
MMC — Mass Media Communication
RTV — Radio-Television
SED — Speech Education
SPC — Speech Communication

Graduate Courses

ADV 5503. Media Consumer Behavior (3). Research and analysis of consumer behavior.

ADV 5505. Media Market Research (3). Prerequisite: COM 5331. Measurement of electronic media audiences, with emphasis on broadcast/cable ratings. Review of quantitative and qualitative methods used in research on electronic media and entertainment technologies.

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 5145. Communication Issues in Organizational Development (3). (S/U grade only.) Provides students a comprehensive introduction to the communication theory and practice of organizational development with special attention to the use of research methodology in the design of interventions.

COM 5305r. Interactive Communication Research (1–3). Engage in primary and secondary research on interactive media developments, uses, and effects. May be repeated to a maximum of six (6) semester hours.

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). Prerequisite: COM 5312. 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 5336r. Interactive-Media Programming and Design (3). Conceptualization and development of an interactive media product (i.e., interactive compact disc, video-disc, or online service module) for the consumer, business, and/or educational market. May be repeated to a maximum of twelve (12) semester hours. A maximum of six (6) hours may apply to the master's degree.

COM 5337. Interactive Programming and Design for CD-ROM (3). Prerequisite: COM 5338. This course introduces the art and science of designing interactive communication. Its focus is the production of computer-based digital media to effectively communicate with disparate audiences utilizing CD-ROM technology. A required final project is intended to demonstrate the ability to accomplish these goals by combining media and creating a CD-ROM as a deliverable.

COM 5338. Desktop Multimedia (3). The focus of this course is to learn the use of computer hardware and software in the design, production, and delivery of multimedia communication. The tools and techniques in this course are relevant in publishing, advertising, entertainment, and education.

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 websites 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 website as a deleverable.

COM 5340. Historical-Critical Methods of Research (3). Review of historical methods, resources, and critical approaches in communication research.

COM 5401. Analysis of Communication Theory (3). Analyzes the field of communication through the study of key theories of human communication research.

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 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 (9) semester hours; duplicate registration allowed. Departmental approval required.

COM 5911r. Supervised Research (1–5). (S/U grade only.) Departmental approval required. May be repeated to a maximum of five (5) semester hours; duplicate registration allowed. A maximum of three (3) 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 (6) semester hours.

COM 5940r. Supervised Teaching (1–5). (S/U grade only.) Departmental approval required. May be repeated to a maximum of five (5) semester hours; duplicate registration is not allowed. A maximum of three (3) 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 (6) semester hours of credit is required.

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 (9) semester hours. Duplicate registration is allowed.

COM 6401r. Advanced Problems in Communication Theory and Research (2–8). May be repeated to a maximum of eight (8) semester hours; duplicate registration allowed. Departmental approval required.

COM 6900. Preparation for the Preliminary Examination (2–4). (S/U grade only.) Doctoral students only. Departmental 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 (9) semester hours. Duplicate registration is allowed.

COM 6980r. Dissertation (1–12). (S/U grade only.)

COM 8964r. Preliminary Doctoral Examination (0).

COM 8966r. Master's Comprehensive Examination (0).

COM 8976r. Master's Thesis Defense (0).

COM 8985r. Dissertation Defense (0).

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 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 (9) 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 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 (6) semester hours.

SED 5340. Teaching Communication in College (3). An analysis of principles and theories of instructional design used in preparing and teaching courses in communication.

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 5639. Rhetoric of Women's Issues (3). Examination of selected social and political issues which affect women today; analysis of content, lines of argument, supporting evidence, and rhetorical strategies.

SPC 5645. Rhetoric and Human Affairs (3). An analysis of variant forms of communication as an instrument for advancing a political or social thesis.

SPC 5655. Political Rhetoric: Language and Persuasion (3). Study of the styles and modes of persuasion, language, and rhetoric used in the political arena.

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 (9) semester hours; duplicate registration allowed.

Department of COMMUNICATION DISORDERS

College of Communication

Chair: Richard Morris; *Professors:* Goldstein, Hardiman, La Pointe, Wetherby; *Associate Professors:* Bourgeois, Crowley, Morris, Walker; *Assistant Professors:* Kemker, Lasker, Stierwalt; *Visiting Associate Professor:* Woods; *Associates in Communication Disorders:* Blumsack, Hudson; *Assistants in Communication Disorders:* Justl, Landis, McClung; *Professors Emeriti:* Haas, Schendel

The Department of Communication Disorders offers programs leading to the master of arts (MA), master of science (MS), advanced master of science (AMS), 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 Department of Communication 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 laboratories provide facilities for the study of physical and psychological aspects of sound, speech, voice, and language. The **Speech 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. The **Voice Science Laboratory** includes computer-interfaced instrumentation for measuring vocal intensity and pitch, aeromechanical aspects of voice and resonance, and physiological functioning of respiration and the vocal apparatus. The **Hearing Science Laboratory** utilizes computerized instrumentation for basic research on loudness, pitch, binaural hearing, and the temporal aspects of hearing, as well as for the study of hearing sensitivity using a variety of auditory stimuli. The facility includes two sound attenuating suites and an electronics shop. The **Emerging Language Laboratory** includes equipment for recording, editing, and analyzing audio and video samples of speech and language discourse and social interactions. On-site recording facilities can accommodate small groups of children and children with their parents. 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 **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 faculty 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 Florida State University **Center for Autism and Related Disabilities** was established in 1993 and is one of five centers in the state. Over 850 individuals with autism or related disabilities have been identified in the 18 counties in the Florida panhandle served by the FSU center. The center provides services to eligible individuals for communication, social, and behavior problems, and provides information, consultation, and technical assistance to families and professionals. The center also trains professional and preprofessionals who serve, or are preparing to serve the client population.

For further information about all graduate admission and degree requirements contact: *Department Secretary, Department of Communication Disorders, The Florida State University, Tallahassee, FL 32306-1200 (850) 644-2253.* E-mail: *commdis.info@comm.fsu.edu* and please include your mailing address.

Master's Degree Programs

The Florida State University 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 faculty and staff. Students are encouraged to collaborate with faculty on research and clinical program development.

The program offers courses of study leading to the master of science or master of arts degree (thesis or nonthesis options). Speech pathology or language pathology may be emphasized in the student's plan of study, which is designed to exceed the requirements of the American Speech-Language-Hearing Association's Certificate of Clinical Competence and The Florida Certificate of Registration. 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 The Florida State University generally graduate from the program in six academic semesters, which includes a semester of off-campus internship.

Requirements

Students must submit applications to both the University and the department. The Florida State University Department of Communication Disorders requires an individual applying for a master's degree to hold a bachelor's degree in communication disorders or its equivalent. Applicants for admission to the master's degree programs must meet the University's minimum standard of a 3.0 upper division GPA or a Graduate Record Examination (GRE) score of 1000 (verbal and math sections combined) before an application will be considered by the department. However, meeting this minimum does not assure acceptance for graduate study in the department as admission is competitive. Two written recommendations from previous professors or clinical supervisors, copies of GRE scores, and copies of transcripts of all academic work completed to date should accompany applications and be sent directly to the department. Normally admission is during the fall semester. Application for either semester must be submitted by February 1st.

All graduate students 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. A student in a master's degree program may choose to complete a thesis. In general, six (6) semesters is typically required for the completion of the master's degree. A clinical internship is required.

Advanced Master's Degree

A master's degree in speech-language pathology, communication disorders or the equivalent is required for admission to this program. A student preparing for the advanced master's degree is required to present a program of studies acceptable to the major professor and supervisory committee. A thesis-preparation curriculum is required, including a minimum of thirty (30) semester hours beyond the master's degree with three to six (3–6) semester hours for the thesis.

Doctoral Program

Admission to the doctoral program is contingent upon meeting The Florida State University policy on admission for the advanced degree. 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 15th.

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 minimum scores of 500 on the verbal and 500 on the quantitative sections of the GRE.

By the end of the first year of the program, the student should form a doctoral supervisory committee composed of a minimum of four members. Three members must hold doctoral directive status, and one member with this status must be selected from a different department. Normally, this member represents the student's collateral area of study. The departmental chair will appoint the major professor who must be a member of the graduate faculty with doctoral directive status 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.

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 doctoral supervisory committee **may** approve any course(s) already completed to apply toward completion of the core requirements.

Requirements

The student must demonstrate knowledge beyond the master's level in research tools (minimum of fifteen [15] semester hours), in communication processes in normal and/or disordered populations (minimum of nine [9] semester hours in doctoral seminars), and in a collateral specialization area (minimum of twelve [12] semester hours).

During the doctoral program, the student must demonstrate teaching abilities by taking major responsibility for teaching at least one undergraduate lecture course; the student must enroll in three (3) semester hours of SPA 5940r, Supervised Teaching. The student must also demonstrate research skills by taking three to five (35) semester hours of SPA 5910r, Supervised Research.

Candidacy for the Doctor of Philosophy Degree

Advancement to candidacy for the PhD degree is contingent upon the student successfully passing a preliminary examination. The preliminary exam may be completed in one of two forms. Each of these options includes an oral examination with a choice of the written form.

Option 1. The student must write extensively on topics selected by the committee. This examination usually consists of 20 to 24 hours of writing time and should be completed within five days.

Option 2. The student must produce three written products: an evaluation of knowledge of research methodology; a critical review of the literature; and a written product relevant to the student's major career objective, such as a grant proposal, a research report, or a course design and curriculum. The specific requirements must be approved by the committee before initiating the preliminary exam and is expected to be completed within a semester of its initiation.

Dissertation

Upon advancement to candidacy, the student may begin working on the dissertation. The student must present a research proposal to the student's committee, and it must be approved before the student begins collecting data.

Definition of Prefix

SPA — Speech/Language Pathology and Audiology

Graduate Courses

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 5132. Speech Science (3). Advanced study of duration, fundamental frequency, intensity, and wave composition in speech.

SPA 5133r. Instrumentation in Communication Science (1–3). An introduction to electronics and electronic instrumentation used in the field of communication disorders. Includes classroom lectures as well as hands-on experience in the selection, use, calibration, and maintenance of this equipment. May be repeated to a maximum of three (3) semester hours.

SPA 5204. Phonological Disorders (3). 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). An advanced course concerned with etiology, symptoms, and remediation of a variety of organic voice disorders.

SPA 5225. Fluency Disorders (3). Emphasis is on theories of treatment of stuttering disorders, various therapeutic approaches.

SPA 5230. Motor Speech Disorders (3). Diagnostic and therapeutic procedures employed in the management of speech and language problems of neurologically impaired persons.

SPA 5252. Structure-Based Communication Disorders (3). A foundation course to prepare SLP students to evaluate and manage communication disorders of voice, fluency, and articulation plus dysphasia and laryngectomy.

SPA 5254. Neurologic-Based Communication Disorders (3). 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 5301Lr. Audiology Laboratory (1). Labs are paired with graduate-level courses in audiology which require extensive out-of-class use of instrumentation. Students may register for more than one lab per semester with a maximum of four (4) semester hours total for all semesters enrolled.

SPA 5305Lr. Measurement and Management of Impaired Hearing (1–3). 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). Amplification devices, assessment of hearing impairment; perception of speech, receptive communication strategies.

SPA 5354. Industrial Audiology (2). Identification procedures, damage-risk criteria, conservation procedures, psychological and medical problems associated with industrial noise.

SPA 5401. Language-Learning Disabilities in School-Age Children (3). Prerequisites: LIN 3710, SPA 4400. Strategies for assessment and intervention of conversational, narrative, and metalinguistic abilities of school-age children and adolescents with language-learning disabilities.

SPA 5404. Communication Intervention: Infants and Preschoolers (3). Prerequisites: LIN 3710 and SPA 4400; or consent of instructor. 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 5432. Autism and Severe Communicative Disabilities (3). 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 5460. Foundations of Developmental Communication Disorders (3). Provides an overview of language and phonological impairments. Prepares students to facilitate development in childrens language learning systems while taking into account the contextually-based needs of children with developmental communicative disorders.

SPA 5462. Current Issues in Developmental Communication Disorders (3). Prepares speech-language pathologists to evaluate and manage developmental communication disorders, with families, educators, and other service providers. This overview will focus 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. 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 Speech-Language Pathology Practicum (1–3). Advanced supervised practice in diagnostic and therapeutic procedures with various language and speech problems. May be repeated to a maximum of eight (8) semester hours. Students may enroll in more than one section during the same semester.

SPA 5506r. Advanced Audiology Practicum (1–3). Advanced supervised practice in diagnostic and therapeutic procedures with various audiological problems. May be repeated to a maximum of eight (8) semester hours. Students may enroll in more than one section during the same semester.

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). Completion of formal and informal evaluation procedures with children who have speech and/or language disorders. May be repeated to a maximum of twelve (12) semester hours.

SPA 5528Lr. Laboratory in Adult Speech/Language Pathology Diagnostics (1–3). Completion of formal and informal evaluation procedures with adults who have speech and/or language disorders. May be repeated to a maximum of twelve (12) semester hours.

SPA 5553 Seminar in Clinical Differential Diagnostics (1). Corequisite: SPA 5553L. Discussion of formal and informal assessment of a variety of speech and language disorders. Content discussed will relate to people to be evaluated during accompanying laboratory.

SPA 5553L. Laboratory in Clinical Differential Diagnostics (2). Corequisite: SPA 5553. Completion of formal and informal evaluation techniques with people who have a variety of speech and language disorders.

SPA 5554. Counseling in Speech-Language Pathology (3). Supervision, counseling, and interviewing in the area of communication disorders.

SPA 5554Lr. Supervision and Counseling in Communication Disorders (1). Laboratory 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 (3) 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 nonspeaking individuals with developmental and acquired disorders is covered.

SPA 5564. Communication and Aging (3). The anatomic, physiologic, and acoustic changes in the hearing and speech mechanism with aging. The effect of those changes on hearing and speech. The communication disorders found among older people.

SPA 5565. Seminar in Dysphagia (3). 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. Speech and Language for the Hearing Impaired (3). 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 (8) 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 (5) semester hours. A maximum of three (3) 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.) Advanced graduate students will have 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 (5) semester hours. A maximum of three (3) semester hours may apply to the master's degree.

SPA 5944. Speech-Language Pathology Internship (1–12). (S/U grade only.) 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 (12) semester hours.

SPA 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours must be earned.

SPA 5972r. Advanced Master's Thesis (1–6). (S/U grade only.) A minimum of six (6) 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 (9) semester hours.

SPA 6231r. Seminar in Neuropathologies (1–3). May be repeated from term to term, up to a maximum of nine (9) semester hours.

SPA 6434r. Seminar on Developmental Disabilities (1–3). 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 will examine cross-disciplinary contributions to developmental disabilities research, service, and policies. May be repeated to a maximum of nine (9) semester hours.

SPA 6805r. Seminar in Clinical Research Methods (3). Course will advance 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 (9) semester hours.

SPA 6825r. Seminar in Speech Pathology (1–3). Advanced study of communication disorders; review of literature and critique of research methodology. May be repeated from term to term, to a maximum of nine (9) semester hours.

SPA 6841r. Seminar in Language (1–3). May be repeated from term to term, to a maximum of nine (9) semester hours.

SPA 6900r. Readings for the Preliminary Examination (1–6). (S/U grade only.) Prerequisites: Doctoral standing, 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 (6) semester hours.

SPA 6930r. Seminar in Special Topics (1–3). Content will vary as faculty offers different issues and special topics concerning the discipline. May be repeated from term to term, up to a maximum of nine (9) 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).

SPA 8966. Master's Comprehensive Examination (0).

SPA 8967r. Advanced Master's Comprehensive Examination (0). (S/U grade only.)

SPA 8976. Master's Thesis Defense (0).

SPA 8977r. Advanced Master's Thesis Defense (0). (S/U grade only.)

SPA 8985. Dissertation Defense (0).

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

Chair: Sudhir Aggarwal; *Professors:* Aggarwal, Baker, Desmedt, Gallivan, Hawkes, Kohout, Lacher, Levitz, Mascagni, Riccardi, Whalley; *Associate Professors:* Banks, Schwartz, Turner; *Assistant Professors:* Douglas, Liu, McDuffie, VanEngelen, Yasinsac, Yuan; *Visiting Professors:* Burmester, Van Dooren; *Visiting Assistant Professor:* Srinivasan; *Courtesy Professors:* Carpenter, Conrad, Erlebacher, Fox, Gaede, Harmon, Hussaini, Kacmar, Simons, Srivastava; *Computing Resources Manager:* Sprague; *Associates in Computer Science:* Baldauf, Gaitros; *Assistants in Computer Science:* Myers, Scott, Sprague, Stoecklin; *Assistant Scholar/Scientist:* Leach

In computer science education, whether graduate or undergraduate, currency 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 and doctor of philosophy degrees. The department also has a number of active research programs in a) core disciplines such as programming languages, compilers, real-time systems, networks, parallel computation, databases, fault tolerance, and foundations; b) scientific and engineering applications areas, including scientific problem solving environments and large-scale scientific and computation databases; c) computer and network security, including cryptography; and d) advanced technology sciences, 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.

Several research institutes and research centers have been established at the University. Several of our faculty members work closely with one of these, the **School of Computational Science and Information Technology (CSIT.**) It was established as a university-based multidisciplinary program to develop new algorithms and numerical methods to exploit various supercomputer architectural characteristics. Partially funded by the U.S. Department of Energy, CSIT consists of scientists, postdoctoral research fellows, graduate students, and supporting technical and administrative staff.

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 a group of high-performance workstations, file servers, and compute servers over the departmental LAN. Students and faculty whose research requires higher computational power may apply for access to a variety of state-of-the-art machines, including supercomputers and computer clusters, across the University.

Other affliliated research laboratories include the following:

The **Security and Assurance in Information Technology (SAIT) Laboratory** is dedicated to synthesis of education and research through the combined focus on theory and application of information security techniques.

The **Embedded Systems/Compilers Laboratory** investigates a wide variety of issues related to embedded systems and compilers. Tools are constructed to assist compiler writers in optimization and retargeting.

The **Vision Laboratory** conducts research motivated by psychophysical data and neurophysiological findings to develop models for real-world problems.

The **Networking Laboratory** investigates issues related to QoS routing, communication algorithms, and message passing libraries.

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/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) and make a minimum combined score of 1100 with a minimum of 650 on the quantitative aptitude part.

Unless specifically admitted into the part-time graduate program, all students are required to maintain full-time enrollment (at least nine [9] semester hours per term, excluding Summer) in courses related to their program of studies throughout the entire program of study (except term of graduation.) With the exception of the term of graduation, all graduate students are expected to register for one regular computer science course (a course other than an individualized course such as DIS, thesis, etc.) each term of enrollment. The student must receive a grade of "B–" or better on all graduate courses taken to satisfy the minimum requirements of either graduate degree. Once these minimum requirements are met, however, it is permissible to take any subsequent courses on an "S/U" basis.

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 participate in an exit interview with the chair or associate chair during the term of graduation.

Master's Degree

The department offers four majors at the master's level: computer science, information security, software engineering, and computer and network system administration. Each major offers thesis, project and course-based options.

Upon admission to the master of science (MS) program, students automatically are placed in the computer science major. Once enrolled, a student interested in one of the specialized majors then may apply to that major for admission.

In **all** majors, a student must complete thirty-two (32) semester hours in computer science courses numbered 5000 or above, including approved CIS 5930 and CIS 6930. However, supervised teaching, supervised research, directed individual study, and courses with prefix CGS are excluded. As part of the thirty-two (32) 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 areas to satisfy the area requirements:

Software

CEN	5035	Software Engineering (3)
COP	5570	Advanced Unix Programming (3)
COP	5621	Compiler Construction (3)

Systems

CDA	5155	Computer Architecture (3)
CEN	5515	Data and Computer Communications (3)
COP	5611	Operating Systems (3)

Theory

COT	5310	Theory of Automata and Formal Languages (3)
COT	5410	Complexity of Algorithms (3)
COT	5540	Logic for Computer Science (3)

Additional 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:

CEN	5515	Data and Computer Communications (3)*
CIS	5357	Network Security, Active and Passive Defenses (3)

CIS	5370	Computer Security (3)
CIS	5406	Computer and Network Administration (3)

plus **one** of the following courses:

CDA	5140	Fault Tolerance and Reliability (3)
COP	5570	Advanced Unix Programming (3)*
COP	5611	Operating Systems (3)*
COT	5310	Theory of Automata and Formal Languages (3)*
COT	5410	Complexity of Algorithms (3)*

Please refer to *http://www.cs.fsu.edu/grad* for admission details.

Software Engineering (SE) Major

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 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/grad* for admissions and professional experience details.

Computer and Network System Administration (CSNA) Major

A student in the computer and network system administration (CSNA) major also is required to take the following courses; those marked with a "*" also satisfy the area requirements:

CDA	5155	Computer Architecture (3)*
CEN	5515	Data and Computer Communications (3)
CIS	5406	Computer and Network Administration (3)
COP	5570	Advanced Unix Programming (3)
COP	5611	Operating Systems (3)

A student in this major must satisfy a field experience requirement before graduation.This cannot be satisfied by coursework alone.

Please refer to *http://www.cs.fsu.edu/grad* for admissions and professional experience details.

Thesis, Project and Course-based Master of Science 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 (8) courses (twenty-four [24] semester hours) at or above the 5000 level, plus at least six (6) semester hours of CIS 5970r, Thesis. At most, six (6) semester hours of CIS 5970r may be counted toward the required thiry-two (32) semester hours for the Master of Science (MS) degree. The eight (8) courses must include at least one (1) course from each area as described above. Approved CIS 5930/6930 courses are counted among these, but supervised teaching, supervised research, 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 departmental 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 (9) courses (twenty-seven [27] semester hours) at or above the 5000 level, plus at least three (3) semester hours of CIS 5915r, Graduate Software Project. At most three (3) semester hours of CIS 5915 may be counted toward the required thirty-two (32) semester hours for the Master of Science (MS) degree. The nine (9) courses must include at least one from each of the areas described above. Approved CIS 5930/6930 courses are counted among these, but supervised teaching, supervised research, directed individual study (DIS), and CIS 5970 may not be included. The student also must register for CIS 8966, Master's Comprehensive Examination (0), to defend the project. An electronic version of the project must be submitted to the departmantal 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), ten (10) courses (thirty [30] semester hours) at or above the 5000 level, including at least one course from each of the three areas detailed above. Approved CIS 5930/6930 courses are counted among these, but supervised teaching, directed individual study (DIS), supervised research, CIS 5915 and CIS 5970 may not be included. A student must also register for, and pass CIS 8966, Master's Comprehensive Examination (0), which is given at least once a year.

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 of serve as the major professor. In consultation with the major professor, the student must secure the consent of at least two additional graduate faculty members to serve as the supervisory committee, chaired by the major professor.

Doctoral Degree

The doctor of philosophy is regarded as a research degree and is awarded on the basis of accomplishment in a recognized specialty in computer science. Such accomplishment should include scholarly mastery of the field, significant contributions to new knowledge in the field, and written and oral communication skills appropriate for the field.

The requirements for the PhD include course work; a master's degree in computer science or equivalent; passing the preliminary examination; successfully defending a dissertation prospectus; and successfully defending a dissertation. A PhD student may be admitted to candidacy only after completing the master's degree, or the equivalent, and passing the doctoral preliminary exam.

Course Requirements

The doctoral student shall complete at least two (2) courses in each of the three areas (software, systems, and theory) from those required for the master's degree. Students entering the program after earning a masters degree in computer science may have some or all of the above course requirements waived, upon approval of the department chair, based on having already taken equivalent courses at this University or at another institution.The doctoral student also must complete at least twenty-four (24) hours of CIS 6980r, Dissertation. A student may enroll in CIS 6980r only after being admitted to candidacy. Additionally, the student must have completed CIS 5935, Introductory Seminar on Research (2).

Student Portfolio

All students admitted to the program are required to compile and keep current a portfolio containing information relevant to the student's progress in the program, e.g., curriculum vitae, courses taken and grades received, sample programming and writing assignments, any professional publications, and semester activity reports. Guidelines for preparing the portfolio are published by the Department of Computer Science.

The portfolio is evaluated annually by the departmental portfolio evaluation committee. This committee consists of a core that is appointed by the department chair, together with any other department faculty with doctoral directive status who elect to participate. After each annual evaluation, the portfolio evaluation committee will recommend whether the student should continue in the program.

Before a student is admitted to PhD candidacy, the portfolio must be defended orally and include at least one example of writing by the student. This may be a research paper that has been accepted for a conference or journal. It may also be a project paper or thesis whose content and writing are judged by the portfolio evaluation committee to be of publication quality.

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: two (2) additional faculty members of the department; and one (1) member of the graduate faculty in another department. In addition, the chair will appoint a member to serve as departmental representative. All members must hold doctoral directive status.

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.

Area Examination

The area examination 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. The oral part is open to all department faculty having doctoral directive status who elect to participate. Students who do not pass the area exam may be advised to retake both parts of the preliminary examination 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.

Preliminary Examination

The preliminary examination process begins when the student's major professor notifies the department chair that the portfolio is ready for evaluation and the student is ready for an area exam. The date for the area exam is set at the discretion of the department chair, in consultation with the committee conducting the exam. Typically, area exams will only be held during the academic year. At least four (4) weeks prior to the date set for this exam, not counting weeks when the University is not in session, the student is required to submit a current portfolio.

The portfolio will then be reviewed by the departmental portfolio evaluation committee, for completeness and quality of work. This review includes verification that the master's degree or equivalent has been completed, and that the quality of the student's work meets departmental standards for PhD candidates. If the portfolio is not found satisfactory, the area exam will not be taken by the student and the student may be advised to resubmit at a later time. If the portfolio contents are satisfactory, the student will be invited to defend them orally to the portfolio evaluation committee. Upon passing the portfolio evaluation, the area exam may be taken. Normal expectations are that the portfolio defense occurs prior to taking an area exam, or at least in the same semester as the area exam.

Admission to Candidacy

In order to be advanced to candidacy for the doctoral degree, the student must do the following:

1. Hold a master's degree in computer science or have credit for taking graduate coursework in computer science that is approved by the portfolio evaluation committee and the department chair as equivalent to a master's degree;

2. Have passed the preliminary examination, which consists of two parts:

   a. the examination of the student portfolio; and

   b. 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; and

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 (5) years of passing the preliminary exam.

Definition of Prefixes

CAP — Computer Applications
CDA — Computer Design/Architecture
CEN — Computer Engineering Software
CGS — Computer General Studies
CIS — Computer and Information Systems (special topics)
COP — Computer Programming (languages, data structures, software systems, operating systems, compiling)
COT — Computer 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 non-linear 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 5615. Artificial Neural Networks (3). Prerequisite: Senior or graduate standing in science or engineering. Introduction to various aspects of artificial neural networks, with emphasis on elements of design of trainable systems. Topics include linear and nonlinear neurons, linear associators, multilayer networks, and the back-prop algorithm. Theory, simulation techniques, and applications will be covered.

CAP 5625. Relational Methods in Knowledge and Software Engineering (3). Prerequisite: CEN 4681. Use of recent mathematical relations theory in specification, design, and validation of software engineering products, with particular emphasis on applying these new methods in the design of knowledge-based and other AI systems. New knowledge representation and inference mechanisms. Semantics of relational specification structures. New opportunities for parallel processing; tradition and fuzzy relational methods.

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.

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 5026. Applicative Foundations of Software Engineering (3). Prerequisites: COP 4020, MAD 3105 or 3017. Software engineering concepts; formal methods and development of practical skills needed for dealing with intelligent information systems of new computer generations; abstraction, concrete types, modules; type checking and type interference; Lamba calculus; combinators and parallelism; implementations.

CEN 5035. Software Engineering (3). Prerequisites: CEN 4010, 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 5066. Software Engineering in Graphics (3). Prerequisite: CAP 4730. Software engineering techniques as applied to graphical concepts based on ISO 7942, the Graphical Kernal Systems (GKS). Particular topics include binding times, concept coupling, segments, transformations, passive/active graphics, clipping. A class project is required.

CEN 5515. Data and Computer Communications (3). Prerequisite: CDA 3101. Overview of networks; data communications principles; data link layer; routing in packet switched networks; flow and congestion control; multiple access communication protocols; local are network protocols and standards; network interconnection; transport protocols; integrated services digital networks (narrowband and broadband); switching techniques and fast packet switching.

CEN 5521. Networking Personal Computers (3). Examination of data communications for personal computers; local area networks; network configurations; SNA/PC connection, distributed systems, data flow and database control, data security and integrity.

CEN 5720. Computer-Human Interaction (3). Prerequisite: COP 4530. Systematic analysis of user needs and activities from the point of view of the actual user. Design and implementation of effective, user-friendly software. Methods of analysis. Performance and interface of programs. User anxiety and convenience.

CGS 5067. Advanced Navigating the Internet (3). Basic Unix; World Wide Web, Netscape, Lynx, UseNet News, Wais, Mime, Netfind, Traceroute, X.500 directory services, Xv, and HTML programming. Projects include developing Internet tours via the World Wide Web and developing WWW pages for government agencies, community organizations, and businesses. Topology of The Florida State University campus network and the Tallahassee Metropolitan Network.

CGS 5266. Digital Design (3). Prerequisite: MAD 2104 or 3107. For graduate non-majors and graduate majors needing foundational work in computer sciences; credit may not be applied towards a graduate degree in computer science. Boolean algebra and switching functions; gates and IC modules; combinational systems, their simplification and decomposition; symmetric functions; threshold logic; sequential machines; analysis and synthesis; design of digital networks and logic systems.

CGS 5267. Principles of Computer Organization (3). Prerequisites: COP 3330; MAD 2104 or 3107. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied towards 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 5275. Assembly and Machine Language (2). Prerequisite: COP 4530. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied towards a graduate degree in computer science. Basic machine organization; number systems and data representation; assembly language programming, including calling conventions for procedures; floating point arithmetic; interrupts and exception handling; advanced architectural features and alternative architectures.

CGS 5425. Object-Oriented Programming with Data Structures (3). Prerequisites: COP 3330; MAD 2104 or 3107. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied towards 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). Prerequisites: COP 3331, 4530. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied towards 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). Prerequisites: COP 4530; MAD 2104, or 3107. For graduate nonmajors and graduate majors needing foundational work in computer science; credit may not be applied towards 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). Prerequisite: COP 3330; MAD 3104 or 3107. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied towards 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). Prerequisites: COP 3331; MAD 3105 or 3107. For graduate nonmajors and graduate majors needing foundational work in computer science; credit may not be applied towards 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 5469. FORTRAN for Graduate Nonspecialists (3). Prerequisite: A course in differential integral calculus.General introduction, computers and systems, rudiments of FORTRAN, basic data types, arithmetic expressions and assignment statements, basic control statements, arrays, problem solving by computer, subprograms, further data types, formatted input/output.

CGS 5765. Principles of Operating Systems (3). Prerequisites: CDA 3101; COP 4530. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied towards 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 5822. Applicatioins of Information Technology with Java (3). Prerequisite: A prior course in programming. This course is intended 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. Topics include the following: the architecture of the Web, including software and protocols for passing information in typical Web applications; introduction to the Java programming language; developing graphical user interfaces using Swing; an introduction to distributed objects using Java Remote Method Invocation (RMI); and server-side programming using Servlets and JDBC. The emphasis is on practical programming using these technologies. A term project is required.

CIS 5370. Computer Security (3). Prerequisites: CGS 3408; COP 3502, 4610, or permission of instuctor. 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 cryptograpy covering theory and practice. Algorithms such as the RSA, ElGamal, and the Digital Signature Standard are covered in depth.

CIS 5406. Computer and Network Administration (3). Prerequisite: COP 4610. UNIX user commands and shell programming. Problem solving and diagnostic methods, system startup and shutdown, device files and installing devices, disk drives and file systems, NFS, NIS, DNS, sendmail. Managing a WWW site, managing UNIX software applications, system security, performance tuning. Legal and professional issues, ethics and policies.

CIS 5900r. Directed Individual Study (1–4). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

CIS 5542. Network Security, Active and Passive Defenses (3). Prerequisites: COP 4530; MAD 2104 or 3107, or permission of instructor. This course covers 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.

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 (5) semester hours.

CIS 5915r. Graduate Software Project (1–6). (S/U grade only.) Prerequisite: consent of instructor. May be repeated for a total of no more than twelve (12) semester hours while completing a suitable software project for the master's project option.

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 (10) semester hours.

CIS 5930r. Selected Topics in Computer Science (1–3). May be repeated to a maximum of twelve (12) semester hours.

CIS 5935. Introductory Seminar on Research (2). (S/U grade only.) 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 (5) semester hours.

CIS 5970r. Thesis (1–9). (S/U grade only.) A minimum of six (6) semester hours of credit is required.

COP 5570. Advanced UNIX 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. 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 5622. Advanced Topics in Compilation (3). Prerequisite: COT 5300. In-depth study of the following topics: attribute grammars and attribute grammar processors, formal methods of semantic analysis, generalized tree transformers, code selection, analysis and optimization, and error analysis and recovery.

COP 5725. Database Systems (3). Prerequisites: COP 4020, 4531, 4610, 4710. Use of a generalized database management system; characteristics of database systems; hierarchical, network, and relational models; file organizations.

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 5410. Complexity of Algorithms (3). Prerequisites: COP 4531, MAD 3105 or 3107. Formal methods for the analysis of algorithm complexity, application to specific algorithms, lower bounds, asymptotically optimal algorithms, Reducibilitys, NP completeness, and other classifications of hard problems.

COT 5421. Theory of Computability (3). Prerequisite: COT 4420. Primitive recursive and partial recursive functions; equivalence of models of computation, limitations of computability, computational complexity issues.

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.

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.

CAP 6616. Autonomous Behavior in Artificial Neural Systems (3). (S/U grade only.) Prerequisite: CAP 5615. Time, activation dynamics, and knowledge dynamics in artificial neural systems. Unsupervised learning theory. Current literature review. Applications.

CIS 6900r. Directed Individual Study (1–12). (S/U grade only.) May be repeated to a maximum of twenty-four (24) semester hours.

CIS 6930r. Advanced Topics in Computer Science (1–3). May be repeated to a maximum of twelve (12) semester hours.

CIS 6935r. Advanced Seminar in Computer Science (1). May be repeated to a maximum of eight (8) semester hours.

CIS 6980r. Dissertation (1–12). (S/U grade only.)

CIS 8964. Doctoral Preliminary Examination (0). (S/U grade only.)

CIS 8966. Master's Comprehensive Examination (0). (S/U grade only.)

CIS 8976. Master's Thesis Defense (0). (S/U grade only.)

CIS 8985. Defense of Dissertation (0). (S/U 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

School of Criminology and Criminal Justice

Professors: Blomberg, Chiricos, Doerner, Gertz, Kleck, Maier-Katkin, Waldo; *Associate Professors:* Bullington, Coonan, Greek; *Assistant Professors*: Close, Kerbs, Kutnjak Ivkovich, Li, Peterson; *Visiting Professor:* Currie; *Internship Director*: Bedard; *Professors Emeriti*: Bassin, Czajkoski, Jeffery, Kirkham

The School of Criminology and Criminal Justice offers graduate degree programs leading to the master of science, master of arts, and the doctor of philosophy degrees. In addition to the general criminology degree programs, a dual master's degree program is offered with the School of Public Administration and Policy. An evening master's program is also provided.

For complete details of degree requirements, plus a description of the School of Criminology and Criminal Justice, its facilities, opportunities, and available financial assistance, refer to the "School of Criminology and Criminal Justice" chapter of this *Graduate Bulletin*.

Definition of Prefix

CCJ — Criminology and Criminal Justice
CJE — Criminal Justice: Law Enforcement
CJJ — Criminal Justice: Juvenile Justice
CJL — Criminal Justice: Law and Process

Graduate Courses

CCJ 5016. Crimes of the Powerful (3). This course provides an indepth 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 class 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 5026. Social Justice (3). This class investigates the relationships among social policy, social justice, and criminal justice. It begins by considering various definitions of social justice and proceeds to study how social policy pursues different potential visions of social justice. The impact of social policy on crime and justice is also studied.

CCJ 5027r. Seminar in Social Justice (3). This class is a repeatable seminar that explores in detail specific topics having to do with social justice. Specific topics are announced by the instructor. May be repeated to a maximum of nine (9) semester hours.

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 (9) 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 5078. Computer Applications in Criminal Justice (3). 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 email, chat, forum discussions, search engines, web page browsers, etc.

CCJ 5082. Science, Evidence and the Law (3). 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 Studies (3). An overview of the theoretical issues and research on the law and legal control of deviance in society.

CCJ 5309. 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.

CCJ 5485. Organizations and Public Policy in Criminal Justice (3). An examination of the development of policy and discussion of major policy issues.

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 5605. Theory in Criminology and Criminal Justice (3). Sociological, economic, and political theories of law formation and lawbreaking.

CCJ 5606. Survey of Criminological Theories (3). Physiological, genetic, psychological, and psychiatric theories of criminal behavior.

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 5609. The Conduct of Inquiry in Criminology and Criminal Justice (3). This course considers the nature of scientific thought and practice. The various "methods of knowing" of the multiple disciplines that study crime are reviewed, and the traditions and uses of the scientific method are presented.

CCJ 5613. Integrated Systems Theory of Maladaptive Behavior (3). Identify the roles played by biochemistry, behavioral genetics, psychobiology and behavioral psycholbiology in the development of integrated systems theory of human behavior.

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. International Crime and its Control (3). Course covers a large quantity of factual information about the nature and amount of transnational crime and about the agencies which study and seek to control 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). 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 5704. 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.

CCJ 5705. Research Methods in Criminology I (3). Research design for criminological studies with an emphasis on data collection methods and measurement of validity and reliability.

CCJ 5706. Applied Statistics in Criminology I (3). 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 5710. Research Practicum (3). This class considers the analysis of data on a study of crime using a database especially assembled for this course. Students develop research hypotheses, conduct analyses, and write papers for submission to professional journals.

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 permission of instructor.

CCJ 5946r. Criminal Justice Practicum (3–6). (S/U grade only.) Prerequisites: CCJ 5078, 5285, 5606, 5704; nine (9) 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 (6) semester hours of credit must be earned.

CCJ 5974. Area Paper in Criminology (3). (S/U grade only.) Analysis and evaluation of literature within a substantive area of criminology. Enrollment requires approval of the major professor.

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 (12) semester hours.

CCJ 6608r. 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 (9) semester hours.

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 approach 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 (9) 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 (12) semester hours.

CCJ 8969r. Preliminary Doctoral Examination (0).

CCJ 8976r. Master's Thesis Defense (0).

CCJ 8985r. Dissertation Defense (0). (S/U grade only.)

Interdepartmental Certificate Program in CRITICAL THEORY

College of Arts and Sciences

Director: Linda A. Saladin, 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 The Florida State University as a regular or special 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 advisor. 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 (18) semester hours of course work, 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 (12) semester hours of course work 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 course work 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 course work will then be submitted to the director who will confer a certificate at the student's completion of a graduate degree at The Florida State University.

Note: a course required for a degree program can also be used to satisfy the certificate program. Required course work 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.

CZECH LANGUAGE
see Modern Languages and Linguistics

Department of DANCE

School of Visual Arts and Dance

Chair: Elizabeth Patenaude; *Professors:* Davis, Farrell, Fichter, Patenaude, Sias, Sommer, Young, Zollar; *Associate Professors:* Austin, Corbin, Morgan, Perpener, Phillips, Sandifer, Welsh; *Assistant Professors:* Glenn, Humphreys; *Assistant in Dance:* Clark

The Department of Dance offers work leading to the master of fine arts (MFA) degree in dance and the master of arts (MA) degree in dance with a major in American dance studies. Currently both are the only graduate dance programs in Florida. Graduate study in dance began at The 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, the Master of Fine Arts and the Master of Arts degrees in dance in an environment conducive to the highest caliber of dance training, practice and scholarship. The vision of the Department of Dance in higher education entails fluidity between the living art form and scholarly investigation, and dynamic interaction between the training of dancers and the development of scholars. This approach is intended to foster cultivation of the individual's creative, performance and scholarly voice through exposure to diverse practical and philosophical approaches to dance studies and the development of critical thought processes. 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.

The emphasis of the MA degree in dance with a major 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 intertextual culture that shapes American art. As the integration of theory and practice enhances both artmaking 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.

Requirements for an MFA in Dance

The master of fine arts 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 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 minimum score of 1000 on the combined verbal and quantitative portions of the general aptitude test of the Graduate Record Examination. If a 3.0 GPA has been attained, the GRE is not required. 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 departmental 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. A graduate candidate who is a returning dance professional with demonstrated technical proficiency may tailor a course of study which will allow more work in the research (both creative and theoretical) and/or production areas.

Summary of Minimum Requirements

The master of fine arts degree in dance requires a minimum of sixty (60) semester hours, normally constituting a three-year course of study. This minimum must contain fifty-two to fifty-four (52–54) semester hours of dance courses, including twenty-two to twenty-four (22–24) semester hours of technique, three (3) semester hours of seminar in dance history and research, twenty-one (21) semester hours of specified theoretical and studio courses, and six (6) semester hours in a final project (creative thesis: graduate concert) in choreography and/or performance. The student must earn six to eight (6-8) 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 to twenty-four (22–24) semester hours and fulfillment of proficiency requirement: DAA 5118, 5218.

2. **Seminar:** Studies in Dance History and Research, Three (3) semester hours: DAN 5191.

3. **Other Dance Courses:** Twenty-One (21) semester hours to include: DAA 5618 Choreography, three (3) semester hours; DAN 5158 Theory of Dance Performance and Directing, three (3) semester hours; DAN 5190 Theory and Practice of Technique, three (3) semester hours; DAA 5648 Choreographic Project, three (3) semester hours; DAN 5510 Visual Design for Choreography, three (3) semester hours; Dance history, with specific courses to be selected in consultation with advisor, six (6) semester hours.

4. **Final Project in Choreography and/or Performance:** Six (6) semester hours: DAN 5972 (creative thesis: graduate concert).

5. **Electives:** Six to eight (6–8) semester hours.

Total: Sixty (60) semester hours.

Comprehensive Examination

To fulfill graduation requirements, the successful completion of a final examination is required: DAN 5960r.

Requirements for a MA in Dance with a major in American Dance Studies

The master of arts in dance with a major 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 minimum score of 1000 on the combined verbal and quantitative portions of the Graduate Record Examination or a 3.0 undergraduate grade point average is required for admission. Admission into the degree program will be determined on the basis of these University-wide requirements, three required letters of recommendation, and the applicant's required essay. The students' progress is 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.

Summary of Minimum Requirements

The master of arts in dance with a major in American dance studies requires a minimum of thirty-six (36) semester hours of graduate-level course requirements, normally constituting a two year course of study. This minimum must contain twenty-four (24) semester hours of required courses, including three (3) semester hours of seminar in dance history and research, nine (9) semester hours in American dance history, three (3) semester hours in theory of dance, and three (3) semester hours in special topics in dance, and

six (6) semester hours of thesis work. Additionally, the student must earn twelve (12) semester hours of electives courses outside the Department 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 developed with the advisor. 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 (12) 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 (3) 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 (3) semester hours each to total nine (9) semester hours: DAN 5147, DAN 5148, DAN 5149.

3. **Theory of Dance:** Three (3) semester hours: DAN 5128.

4. **Special Topics in Dance:** Three (3) semester hours: DAN 5930.

5. **Masters Thesis in Dance History:** Six (6) semester hours: DAN 5973.

6. **Electives:** Twelve (12) semester hours.

Total: Thirty-six (36) 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 Activities
DAE — Dance Education
DAN — Dance

Graduate Courses

DAA 5118r. Contemporary Dance (1–3). Faculty placement or consent of instructor required. May be repeated to a maximum of eighteen (18) semester hours.

DAA 5218r. Ballet (1–3). Faculty placement or consent of instructor required. May be repeated to a maximum of eighteen (18) 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 (10) 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 (3) 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 (10) semester hours.

DAA 5950. New York City: Arts and Resources as the Art Event (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.

DAE 5940. Supervised Teaching (2). (S/U grade only.) A maximum of two (2) hours may apply to a master's degree.

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 (3) 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 (3) 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 (3) 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 (6) semester hours.

DAN 5192. Dancing in the Movies (3). Traces the evolution of dance in the American popular film industry. Emphasis is placed on how movies encapsulate popular sterotypes and icons, revealing the roles of gender, race, fashion, economic and political forces.

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 relationsip to the culture(s) and events that produced and influenced them.

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 5905r. Directed Individual Study (2–3). May be repeated to a maximum of twelve (12) semester hours. May be repeated during the same semester.

DAN 5910. Supervised Research (2). (S/U grade only.) A maximum of two (2) 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 (9) semester hours.

DAN 5960r. Master's Comprehensive Examination (0).

DAN 5972r. Creative Thesis: Graduate Concert (2–6). (S/U grade only.) For MFA degree candidates in dance only. The development and production of the graduate concert. May be repeated to a maximum of nine (9) semester hours. A minimum of six (6) 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 masters thesis in American dance history. May be repeated to a maximum of six (6) semester hours. May be repeated during the same semester.

DAN 8976. Master's Thesis Defense (0). (S/U grade only). Prerequisite: DAN 5973. Thesis topic to be arranged with advisor.

Center for DEMOGRAPHY AND POPULATION HEALTH

College of Social Sciences

Director: Elwood O. Carlson (Sociology); *Professors*: Eberstein (Sociology), Schmertmann (Economics), Serow (Economics), Sly (Sociology), Turner (Sociology); *Associate Professors:* Brewster (Sociology), Miles (Urban and Regional Planning); *Assistant Professors:* Heron (Sociology), Lloyd (Sociology); *Professor Emeritus:* Nam

The Center for Demography and Population Health is concerned with developing a sound basis for theoretical and applied research on human populations. It combines disciplinary perspectives of sociologists, planners, geographers, political scientists, and other social scientists, as well as behavioral and medical scientists. The centers 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, wherein candidates for degrees may elect demography as an area of concentration. Graduate students in other colleges and schools within the University are also welcome to participate in the center's research and training activities.

The center is often able to provide research assistantships both to graduate students in the master's program, as well as to those concentrating in demography in other graduate programs. These assistantships afford students the opportunity to gain practical research experience while working in close collaboration with faculty and other students. The center maintains its own computer laboratory and library facilities, which are available to students in the master's program and which support the centers research and training activities. The center publishes a working-paper series and encourages students to prepare their research findings for presentation at meetings of professional societies and for subsequent publication in scholarly journals. The faculty is very active in research activities and frequently invites students to participate in all phases of a research project. The faculty is often invited to 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 a research setting. Students entering the program should have career objectives that direct them toward midlevel research-oriented positions in the public or private sectors. Basic knowledge and skills are obtained through the completion of a twelve (12) semester hour demographic core, while substantive specialization is obtained by completing an additional fifteen (15) semester hours of elective courses approved by the director; at least six (6) of these hours must be from the list of demographic electives listed below. In addition, each student must complete a master's research paper (six [6] semester hours) in order to receive the master's degree. A minimum of thirty-three (33) 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 by the consent of the director of the center. Candidates wishing to pursue an academic career that normally requires a doctorate have the alternative of seeking admission to the graduate program of one of the departments (sociology, economics, urban and regional planning, political science) that offers a doctoral concentration in demography/population studies.

Courses

Description of individual courses can be found under the departmental listings.

Required Demographic Core

Twelve (12) semester hours:

SYD	5105	Population Theory (3)
		or
ECP	5115	Seminar in Economics of Population (3)
SYD	5135	Techniques of Population Analysis (3)
ECP	5116	Applied Economic Demography (3)
DEM	5930r	Special Topics in Demography [Applied Research Practicum in Demography] (3)

Demographic Electives

Fifteen (15) required semester hours, at least six (6) of which must be from the following courses:

ECP	5115	Seminar in Economics of Population (3)
ECP	5117	Mathematical Demography (3)
GEO	5159	Geographic Information Processing and Systems (3)
SYD	5105	Population Theory (3)
SYD	5145	Population Policy (3)
SYD	5215	Mortality (3)
SYD	5225	Fertility (3)
SYD	5235	Population Mobility (3)
URP	5614	Population and Development Planning (3)

Master's Research

Six (6) semester hours:

DEM	5972r	Master's Research Paper in Demography (3–6) (S/U grade only.)
DEM	8977	Master's Research Paper Defense (0) (S/U grade only.)

DEMOGRAPHY AND AREA STUDIES
see also Middle and Secondary Education; Political Science; Sociology

DEVELOPING AREAS, PLANNING FOR
see Urban and Regional Planning

DEVELOPMENTAL PSYCHOLOGY
see Psychology

DIETETICS
see Nutrition, Food and Exercise Sciences

DeVoe L. Moore and Family Center for ECONOMIC POLICY AND GOVERNMENT

COLLEGE OF SOCIAL SCIENCES

Director: David W. Rasmussen; *Professors:* Barrilleaux, Benson, Gwartney, Holcombe, Ihlanfeldt, 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 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 regulation. 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 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.

Department of ECONOMICS

COLLEGE OF SOCIAL SCIENCES

Chair: James Cobbe*;Professors:*Benson, Canterbery, Cobbe, Fournier, Gwartney, Holcombe, Ihlanfeldt, Isaac, Macesich, MacPherson, Marquis, Norrbin, Rasmussen, Sass, Schlagenhauf, Serow, Sliger; *Associate Professors:* Beaumont, Mason, McCaleb, Prasad, Schmertmann, Zuehlke; *Assistant Professors:* Burke, Lee, Salmon, Young; *Visiting Assistant Professor:* Garriga, Heiland; *Courtesy Professors:* Elzie, Fabricant, Stratis; *Professors Emeriti*: Bell, Downing, Laird, Rockwood, Sorensen

The Department of Economics offers programs leading to the master of science and doctor of philosophy 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 seven 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, 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 writing to: *Director of Graduate Studies, Department of Economics, Tallahassee, FL 32306-2180.*

Admission Requirements

A combined score of at least 1000 on the verbal and quantitative aptitudes portions of the Graduate Record Examinations (GRE) and a grade point average of at least 3.0 over the final two years of undergraduate course work are required for admission. Prior graduate training must show a minimum grade point average of 3.4.

Applicants should provide the department with at least three letters of recommendation which address the applicant's potential for graduate study.

International applicants, whose native tongue is not English, must achieve a minimum score of 550 on the Test of English as a Foreign Language (TOEFL). 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, 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 their Fall term of study.

Application Deadlines

Completed admission applications for U.S. citizens should be submitted at least one month prior to the term the student plans to enter the University; foreign nationals should apply no less than three (3) months ahead. 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.

Departmental Teaching and Research Assistantships

Between 20 and 25 teaching and research assistantships are offered by or through the department each academic year. Graduate assistants normally take nine (9) hours of academic work per semester. Assistantships may be either 10 (quarter time) or 20 (half time) hours per week. At present, half-time assistantships pay $11,000 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 fees, but not other nonwaivable mandatory fees. For the 2002-03 academic year, the value of these waivers was $147.67 per credit hour for in-state students or $616.87 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 graduate program with a bachelor of science degree may apply for a department assistantship for a maximum of four years. Students entering 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 financial aid. 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.

Master of Science Program

A student seeking the master's degree must complete thirty (30) or thirty-three (33) semester hours of course work at the graduate level depending on the program taken. Students thus may select one of two options. They may complete twenty-four (24) semester hours of courses at the graduate level and, in addition, write a thesis for which six (6) hours of credit are granted, or they may complete twenty-seven (27) hours of graduate courses and, for six (6) additional semester hours, complete an applied project under faculty supervision. The thesis must be defended orally before a faculty committee. Two courses in microeconomics, two in macroeconomics, and two in quantitative methods are required of all master's students.

Doctor of Philosophy Program

The doctor of philosophy degree 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 student must show competence by passing PhD preliminary examinations in the core area and in two specialized fields. Generally, two courses are required to satisfy any core area and two courses for each field. The PhD preliminary examinations are administered in January and August.

The core consists of microeconomics and macroeconomics.

The two specialized fields are to be selected from the following list, or with approval of the graduate director, or the student may take work in an outside field:

Applied econometrics

Financial and monetary economics

Industrial organization

International economics and development

Labor economics

Population economics

Public economics

A doctoral student without previous graduate work must complete fifty-four (54) semester hours of graduate course work, including instruction in fundamental quantitative techniques, and may obtain the master's degree en route. Not more than six (6) of the required fifty-four (54) hours may be directed individual study (DIS) course work. In addition, students must complete one course in the history of economic thought and four doctoral workshops.

The student is expected to design a program, in consultation with the faculty and graduate student adviser, which will provide the preparation necessary for the PhD preliminary examinations and for the analysis required in dissertation work. The dissertation entails a minimum of twenty-four (24) hours of credit, is written under faculty supervision, and must be orally defended.

Dual 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 and the master of science in economics. Students must complete eighty (80) semester hours in the College of Law and twenty-four (24) hours in economics. Economics hours encompass the six courses normally required for the master's two courses in a single field, and an applied project.

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, such as international affairs, or in other colleges and schools of the University. These courses include ECO 5005, 5111, 5205, 5226, 5705, 5715, ECP 5705 and ECS 5028. 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 consent of instructor. 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 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 by 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 theoretics, stagflation, aggregate production functions and productivity, and introduction to dynamic macro systems.

ECO 5207. Macroeconomic Theory II (3). Prerequisite: ECO 5204 or permission of instructor. 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. Theory of Statistics (3). This course is an introduction to econometric methods, with emphasis on the theory and application of ordinary least square procedures.

ECO 5420. Basic Applied Econometrics (3). This course introduces students to statistical inference, estimation theory, model building and forecasting methods. An emphasis is placed upon model building and policy analysis. Extensive use is made of PC econometric software.

ECO 5423. Econometric Theory (3). Prerequisite: ECO 5416 or permission of instructor. This course will examine the solution of problems encountered in least-squares procedures, and simultaneous equation models.

ECO 5424. Simultaneous Equation Models (3). Prerequisite: ECO 5423. This course covers simultaneous equation estimation methods including: identification, two-stage least squares, three-stage least squares, and limited and full information maximum likelihood estimation. Other topics include Monte Carlo methods, dynamic systems of equations, and stochastic simulation methods. Data analysis and model building are emphasized with heavy use made of PC and mainframe software.

ECO 5425. Time Series Analysis (3). Prerequisite: ECO 5423. Univariate and multivariate time series methods including: univariate ARIMA, transfer function models, state space models, vector autoregression models, vector error correction models, spectral analysis, causality tests, and unit root tests. Data analysis and model building are emphasized.

ECO 5427. Limited Dependent Variable Models (3). Prerequisite: ECO 5423. This course introduces graduate students to logit, probit, tobit, multinominal logit, selection, and hazard models.

ECO 5434. Economic Forecasting (3). The primary objective of this course is to introduce the basic methods of modern quantitative forecasting. The course focuses on how to analyze the forecasts of others, how to make forecasts, and how to present forecast results in a concise report that others can understand.

ECO 5505. Public Finance (3). Principles of taxation and debt, shifting and incidence, public expenditures and redistribution theory.

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 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.

ECO 5705. International Trade (3). Prerequisites: ECO 2013, 2023. Theory of international trade, the gains from trade, tariffs and other trade restrictions, cartels.

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 5715. International Finance (3). Prerequisites: ECO 2013, 2023. ECO 3223 and 4203 are recommended background courses. 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 (9) semester hours.

ECO 5907r. Directed Individual Study (3). Prerequisite: Permission of instructor. May be repeated to a maximum of nine (9) semester hours.

ECO 5914. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

ECO 5932r. Graduate Tutorial in Economics (1–3). (S/U grade only.) Prerequisites: economics graduate students; instructor's permission. In-depth study of specific topics in economics. Enrollment limited to five (5) students. May be repeated to a maximum of six (6) semester hours.

ECO 5935r. Seminar in Political Economy (1–3). Prerequisite: Permission of instructor. This course covers a changing agenda of contemporary topics in political economy. Students are expected to write and present major research papers for discussion in the seminar. Topics vary from term to term and writing assignments are associated with the seminar topics. May be repeated to a maximum of six (6) semester hours of credit.

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 (6) semester hours. May be repeated in the same semester.

ECO 5940r. Supervised Teaching (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

ECO 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

ECO 5972. Extended Master's Paper (3). (S/U grade only.)

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 consent of instructor. 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 six (6) 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 (6) 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 (12) semester hours.

ECO 6980r. Dissertation (1–24). (S/U grade only.)

ECO 8966r. Master's Comprehensive Exam (0).

ECO 8969r. Preliminary Doctoral Examination (0).

ECO 8976r. Master's Thesis Defense (0).

ECO 8985r. Dissertation Defense (0).

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 5116. Applied Economic Demography (3). Prerequisite: ECP 5115 or consent of instructor. Applications of economic demography, including techniques for dealing with missing or incomplete data. Projections and estimates of population, demographic and economic characteristics. Determining the effects of demographic change on economic and social variables.

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 5238. Labor Compensation, Contracts, and Collective Bargaining (3). Focuses on the structure and level of compensation, economic analysis of unions, and on public-sector labor markets.

ECP 5312. Natural Resource Economics II (3). Capital theory. Benefit cost analysis. The structure of resource industries. Case studies of energy, forestry, and water resources. Critique of natural resource policy.

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 5536. Seminar in Health Economics (3). Provides an in-depth analysis of a wide variety of problems, both theoretical and applied, in the area of health care economics. The major topics to be covered include: demand for health, medical care and health insurance; hospitals and physicians; cost containment measures, Medicare prospective payment, financing uncompensated care, and long-term care.

ECP 5705. Economic Concepts for Business Decisions (3). Prerequisites: ECO 2013, 2023. An examination of fundamentals underlying business activity as related to the process of price management and decision making.

ECS 5005. Seminar in Comparative Economics 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 5028. 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

Chair: Carolyn Herrington*;* **Educational Administration/Leadership—***Professors:* Beckham, Herrington, Irvin, Kunkel, Snyder, Thomas, Wetherell; *Associate Professors*: Biance, Funk; *Professors Emeriti*: Bolden, Gant, Hale, Kannwischer, Luebkemann, Rasmussen, Stakenas; **Higher Education—***Professor*: Beckham, Lick; *Associate Professors*: Bower, Dalton, Jones, Schwartz; *Assistant Professor*: Gaston; *Professors Emeriti*: Bender, Kropp, Waggaman; **Foundations of Education—***Professors:* Milton, Papagiannis, Wallat; *Associate Professors:* MacDonald, Shargel; *Assistant Professors:* Cohen-Vogel, Harris, Iatarola, Milligan, Monkman; *Professors Emeriti:* Grant, Schroeder; **Adult Education—***Associate Professor*: Easton; *Professor Emeritus*: Jahns

The department offers graduate study programs leading to the following degrees in adult education, educational administration/supervision, comprehensive vocational education, foundations of education and higher education: master of science (MS), educational specialist (EdS), doctor of education (EdD), and doctor of philosophy (PhD). In addition, certificate programs are offered in college teaching, educational policy, and human resource development.

The department affirms and strives to fulfill the mission of The Florida State University and the College of Education by providing for advanced professional preparation and continuing development of persons who are committed to education leadership, policy, 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, and courses that develop 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 following are offered by the Department of Educational Leadership and Policy Studies:

Adult education

Comprehensive vocational education

Educational leadership/administration

Foundations of education
- History and philosophy of education
- International/intercultural development education
- Social science and education

Higher education
- Institutional research

Certificate in college teaching

Certificate in education policy

Certificate in human resource development

Admission Requirements

Application for admission, application fee, official transcript from each college attended, and a transcript of Graduate Record Examinations (GRE) scores should be sent to: *Office of Admissions, A2500 University Center, The Florida State University, Tallahassee, FL 32306-2400*. The following items should be sent to the *Department of Educational Leadership and Policy Studies, 113 Stone Building, The 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 adult education, educational administration/supervision, comprehensive vocational education, higher education, history and philosophy of education, international/intercultural development education, social sciences and education or foundations of education; 2) a resumé providing a record of the applicants 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 The 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 TOEFL examination.

ADULT EDUCATION

The graduate program of adult education offers master's, specialist, and doctoral degrees and a certificate program. Its purpose is twofold: to prepare present and future leaders and policymakers for positions of responsibility in institutional and agency settings concerned with adult learning and the education of adults and to contribute to a growing body of knowledge about the dynamics of adult education in its social context through the conduct of research and through training of students in appropriate research skills. The adult education curriculum encompasses the nature, processes, and issues of the general field of adult/continuing education and related specialties. Courses draw from the adult education body of knowledge as well as knowledge from the social sciences, educational foundation areas, and methods of inquiry. Core course requirements at the department and the program level serve as a basis for further study and specialization.

The adult education curriculum approach allows individual students to apply a complementary set of skills and analytic perspectives to the specific issues and forms of adult education that are of greatest interest to them. Our focal concern is with the program development process. Thus, course content as well as research done by faculty and students relate directly or indirectly to policies, problems, and issues associated with program development. The contexts for this work may be local, state, national, and/or international. Settings in which graduates of the program typically assume positions of responsibility include univer-

sities, colleges, and public schools, as well as government agencies, foundations, professional associations, health care systems, and religious, business, industrial, or community-based organizations concerned with issues of continuing education and life-long learning.

Certificate in Human Resource Development

The interdepartmental human resource development (HRD) certificate is designed specifically for those interested or already involved in human resource development responsibilities in organizational settings. Courses are available from several COE departments and include adult learning, program development, instructional design, evaluation, career development, and HRD system management. Fifteen (15) semester hours of core and elective courses are required. The certificate is available to special (non-degree seeking) students or to any graduate student in good standing.

Definition of Prefixes

ADE — Adult Education

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 5075. University Continuing Education (3). Emphasis is on the design and implementation of continuing education.

ADE 5080. Foundations of Adult and Continuing Education (3). Exploration of social, historical, and philosophical foundations undergirding adult and continuing education as a field of study and professional practice.

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 5186. Program Development in Adult Education (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 5193. Education and Training in Gerontology (3). Principles, theory, and practice in the development of education and training in gerontology.

ADE 5280. Problems in the Organization and Administration of Adult Education Agencies (3). Prerequisite: ADE 5080. Emphasis is on general administrative processes and an analysis of the major purposes of the adult education organization.

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 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 5773. Strategies for Participatory Research, Planning and Evaluation (3). Explores strategies and experiences of participatory research, evaluation management and planning in a variety of contexts: educational systems, businesses, public agencies and community organizations, both in this country and abroad.

ADE 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

ADE 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

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 a maximum of twelve (12) semester hours.

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 (12) semester hours.

ADE 5944r. 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. A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

ADE 5971r. Master's Thesis (1–6). (S/U grade only.) Minimum of six (6) semester hours required.

ADE 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) Minimum of six (6) semester hours required.

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.

ADE 6772r. Research Seminars in Adult Education (1). (S/U grade only.) Critical analysis of research literature pertaining to the general field of adult education. May be repeated to a maximum of two (2) semester hours.

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 (3) semester hours.

ADE 6931. Research Seminar in Adult Education (2). (S/U grade only.) Critical analysis of research literature pertaining to the general field of adult education.

ADE 6980r. Dissertation (1–12). (S/U grade only.)

ADE 8964r. Preliminary Doctoral Examination (0).

ADE 8966r. Master's Comprehensive Examination (0).

ADE 8968r. Specialist in Education Comprehensive Examination (0).

ADE 8976r. Master's Thesis Defense (0).

ADE 8978r. Specialist in Education Thesis Defense (0).

ADE 8985r. Dissertation Defense (0).

FOUNDATIONS OF EDUCATION

The graduate program in foundations of education offers master's, specialist, and doctoral degrees in three majors: history and philosophy of education; international/intercultural development education; and social sciences and education.

Definition of Prefixes

EDF — Education: Foundations

Graduate Courses

EDF 5160. The School as a Social System: The Social Psychology of Education (3). Introduction to sociological and social psychological perspectives, concepts, theories, and research used in the study of educational organizations and policies.

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 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 5625. Education and Economic Development (3). An introduction to the role of education in economic development. Topics examined include the relationship of formal and nonformal education to labor markets, employment, income, income distribution, and development in general.

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 equality.

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 (6) 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 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 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 5895r. 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 (10) semester hours.

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 (5) semester hours.

EDF 5911r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) 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 (9) semester hours.

EDF 5943r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

EDF 5974r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

EDF 5975r. Specialist in Education Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

EDF 6475. Qualitative Methods in Educational Research (3). Prerequsites: 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 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 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 (6) 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 (18) semester hours.

EDF 6981r. Dissertation (1–12). (S/U grade only.)

EDF 8965r. Preliminary Doctoral Examination (0). (S/U grade only.)

EDF 8967r. Master's Comprehensive Examination (0). (S/U grade only.)

EDF 8970r. Specialist in Education Comprehensive Examination (0). (S/U grade only.)

EDF 8977r. Master's Thesis Defense (0). (S/U grade only.)

EDF 8980r. Specialist in Education Thesis Defense (0). (S/U grade only.)

EDF 8987r. Dissertation Defense (0). (S/U grade only.)

History and Philosophy of Education

This program area emphasizes the examination of educational issues from the disciplinary perspectives of history and philosophy. Master's, specialist, and doctoral degrees are offered; students are expected to take courses in the cognate disciplines in the College of Arts and Sciences to complement the work done within the department. Students often see teaching and research in history or philosophy of education as a career goal, but many expect to take policy-making positions in schools, governmental agencies, and other policy-oriented organizations. Students from other departments or programs are welcomed as "minors." All are expected to acquire skills in research methods in history or philosophy and to participate in inquiry and debate on policy issues in American education.

International/Intercultural Development Education

International/intercultural development education is designed to prepare individuals to assume leadership roles in education who can: conduct issue- or policy-oriented research or fieldwork in regard to the role of education in the development process, critically evaluate research and practice related to education and development, use research findings and field experiences to formulate relevant educational policy, and design educational programs that will contribute to national or regional development.

Graduates serve in universities, ministries of education, philanthropic foundations, and development agencies overseas or in the United States. International graduates return to their countries to work in policy and research related activities in evaluation and planning departments, educational research and development institutes, or universities. They also return to project-level programs as administrators, curriculum specialists, and program evaluators. American graduates who work in the United States become involved in educational and socially relevant research or development activities. American graduates with international experience usually work with international agencies, philanthropic organizations, universities, or with foreign governments in areas related to research and development. Our graduates are well suited for positions that involve a blend of practice and theory and require a combination of skills in an educational specialty and in one or more of the social sciences.

Social Sciences and Education

The social sciences and education program area emphasizes the study of educational policy issues from the perspective of the social sciences—specifically, sociology, economics, anthropology, and political science. Master's students are expected to choose one of these related disciplines as a minor area en route to their degrees. Doctoral students are expected to specialize in one or two of the related social science areas, in addition to their major doctoral interest.

Graduates serve in universities, policy-making agencies, foundations, or as leaders in field-based educational projects. The explicit intent of the program is to prepare persons who are committed to addressing the enduring educational and social questions which are found where theory, research, and practice meet.

Certificate in Education Policy

This certificate program is designed for those interested in or already engaged in the design, development, implementation, and analysis of educational policy. The program welcomes and serves individuals with diverse interests including local, state, national, and international educational policy; elementary, secondary, higher, or out-of-school education and training; and a variety of work settings such as school districts, state agencies and policy boards, foundations, or international agencies. Eighteen (18) semester hours of courses are required, composed of a core area and three elective area: social sciences and foundations of educational policy, approaches to policy studies, and areas of policy practice. The certificate is available to special (non-degree seeking) students or any graduate student in good standing from any department in the University.

Master's Degree Programs

The department follows the University and College of Education policies governing master's degree programs and also requires a comprehensive examination. One to two years of course work are required for completing the master's degree. The semester hour requirements are thirty-two (32) hours for course-type and thirty (30) hours for thesis-type.

Specialist Degree Programs

The department follows the University and College of Education policies governing specialist degree programs. A comprehensive examination is scheduled at the end of course work for the specialist degree.

Doctoral Degree Programs

The department follows the University and College of Education policies governing doctoral degree programs. Two and one-half years of course work are normally required toward a doctoral degree if the student already possesses a relevant master's degree. Doctoral degrees require that each student complete a minimum of nine (9) research tool credits, pass a diagnostic examination and a preliminary examination, prepare and defend a dissertation prospectus, and conduct and defend a research dissertation in addition to the successful completion of course work.

EDUCATIONAL LEADERSHIP/ ADMINISTRATION

The mission of the educational leadership/administration program at The Florida State University is to develop and enhance dynamic, high-performing leadership for the renewal and improvement of schools and school systems. Our program is designed to help those in leadership roles to provide effective leadership for teaching-learning. Program philosophy is informed by democratic values, including respect for individual rights and responsibilities, participatory and public decision making, pluralism, accountability, and organizational integrity.

Our faculty seek to improve leadership for present and future schools. We value reflective, practice-oriented research and inquiry by faculty and students. We are pledged to promote the leadership qualities of honesty, dynamism, creativity, competence, challenge, and respect for diversity. We value high-quality and action-oriented leadership and endorse a participatory and shared leadership style.

Program objectives for the degrees are drawn from the specified competencies from research and theory on educational leadership, and from collaboration between practitioners and faculty of the department, the college, and the University. A curriculum guide to the graduate program is available through the Department of Educational Leadership and Policy Studies. Specific program objectives are outlined in course syllabi and are implicit in the course requirements for degrees.

The **master's degree** program emphasizes Florida certification in educational leadership, which is the initial certification for Florida principals, and prepares the individual to assume a position as an assistant principal in a school. The program covers the areas of leadership, personnel, communications, curriculum, finance, law, and technology, and the practice and research of educational leadership in public and private K–12 schools. Subject to the approval of the supervisory committee and the department head, students not seeking Florida certification in educational leadership may develop programs of study which meet their professional needs and/or certification standards in other states.

The **specialist degree** provides a program of study composed of specified courses in four program areas that provide opportunities for reflecting each student's unique career interests, background, and training. Course work completed in the specialist degree may contribute to the program of study required in the doctoral program if the student is subsequently admitted to doctoral study. The degree program includes internships, individualized special topics studies, and supervised research experiences.

The **doctoral program** in educational leadership/administration offers two doctoral degrees that differ in their emphases, purposes, and the envisioned careers of those who pursue them.

The doctor of education (EdD) degree signifies professional competence and expertise in practice, requires a broad-based knowledge of theory and research that informs educational policy and practice, and emphasizes the ability to identify and propose useful solutions to complex leadership problems in education.

The doctor of philosophy (PhD) degree requires high research competence in the methods of inquiry, analysis, and exposition; emphasizes scholarly research that sheds light on a domain of interest for other scholars and practitioners; and signifies the attainment of broad conceptual and research skills applicable to the investigation of educational problems and the elaboration of testable hypotheses and theoretical constructs. Applied research requirements distinguish the EdD and PhD degrees in research emphasis.

All doctoral students must complete a minimum of eighteen (18) semester hours in applied research which typically includes a course in basic statistics, qualitative methods, inquiry resources, and design of research.

Master's Degree in Educational Leadership /Administration with a Specialization in Vocational Education

The degree program in educational administration/leadership offers a specialty designed to develop competent teachers, administrators, and other professionals in vocational education. This goal is accomplished through a program of course work, seminars, research, and related experiences that prepare students to become leaders in vocational education, to become innovators in teaching and learning, and to become agents in the process of educational change. With specified coursework, graduates of this master's degree program may be certified as directors of vocational education.

The **master's degree** requires thirty-six (36) semester hours of course work beyond the baccalaureate degree. The courses include those designated as the educational leadership core curriculum, research, and applied courses.

Definition of Prefixes

CGS — Computer General Studies
EDA — Education: Administration
EDG — Education: General
EDM — Education: Middle School
EDS — Education: Supervision
EME — Education: Technology and Media
ESE — Education: Secondary

Graduate Courses

CGS 5310. Information Management Technology in Education (3). A course in information technology for the management of administrative and instructional programs in the educational system.

EDA 5051. Introduction to Leadership Development (3). Considers and applies leadership development models and the competencies required of educational leaders and relates those models to the field of practice.

EDA 5061. Educational Administration (3). Fundamental concepts of the administrative process; administrative organization; communication; decision making; leadership.

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 5192. Educational Leadership (3). Identification of 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 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 institutionpublic 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 5423. Decision-Oriented Educational Research (3). Concepts and methods for producing information for the purpose of school improvement.

EDA 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

EDA 5910r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (12) semester hours.

EDA 5941r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

EDA 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

EDA 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) A minimum of six (6) 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 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 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 (9) 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 (9) semester hours.

EDA 6980r. Dissertation (1–12). (S/U grade only.)

EDA 8964r. Preliminary Doctoral Examination (0).

EDA 8966r. Master's Comprehensive Examination (0). (S/U grade only.)

EDA 8967r. Specialist in Education Comprehensive Examination (0).

EDA 8976r. Master's Thesis Defense (0).

EDA 8977r. Specialist in Education Thesis Defense (0).

EDA 8985r. Dissertation Defense (0).

EDG 5250. Basic Concepts in Curriculum Planning and Organization (3). Provides the student with an in-depth view of curriculum and instruction; and a knowledge base for planning, designing, organizing, and implementing a program of curriculum and instruction.

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 (9) semester hours.

EDM 5045. Schools for Young Adolescents (3). The rationale, clientele, and current issues and problems related to the educational program for young adolescents; the emerging "middle school".

EDM 5405. Issues, Trends, and Practices in Middle Level Education (3). Issues, trends, and practices in middle level education will be covered. The future of middle schools as a separate organizational unit is discussed in light of historical perspective. Grouping practices, developmentally appropriate curriculum and instruction, and leadership issues are explored.

EDS 5941r. Administration and Supervision of Clinical Education (1–3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours. May be taken with EDS 5942r.

EME 5941. Designs for In-Service Personnel Development (3). Systematic procedures for the design of staff development programs for educational, noneducational institutions.

ESE 5015. The American High School (3). Current status of youth education in the United States in historical-cultural perspective; developing a design for youth education; scope and dimensions of the program.

ESE 5035. Trends and Innovations in High School Education (3). Critical analysis of fundamental changes needed in the program of education of youth.

COMPREHENSIVE VOCATIONAL EDUCATION

The Comprehensive Vocational Education Program is designed to develop competent teachers, administrators, researchers, and other professionals in vocational education. This goal is accomplished through a comprehensive program of coursework, seminars, research, and related experiences designed to prepare students to become leaders in vocational education, to become innovators in teaching and research, and to become agents in the process of educational change.

The program is designed to address professional needs, to enhance the competency and technical skills of leaders in vocational education, and to enable the participants to relate experiences in the program to their own educational setting.

Program objectives for the degree are drawn from the specific leadership competencies identified by the Florida Council on Educational Management and those identified as being important for the development of vocational education programs. These competencies have been identified by research on the theory and practice of educational leadership and verified by collaboration between practitioners and faculty from the department, college, and University. The identified competencies are included in the course syllabi and are implicit in the requirements for the degree.

The department's **master of science degree** in educational administration provides for a specialty in the administration of vocational education. This degree requires a minimum of forty-three (43) semester hours beyond the BS degree. Degree programs included in comprehensive vocational education are the educational specialist (EdS), doctor of education (EdD), and doctor of philosophy (PhD).

The **specialist degree** is designed to build on the master's degree with the purpose of enabling the degree recipient to improve by enhancing skills in program planning, evaluation, and administration of vocational education. Course work taken and successful completion of the specialist degree may reduce the number of courses required in the doctoral program for students who are subsequently admitted to doctoral study.

The **doctoral degree** in comprehensive vocational education includes selected vocational education courses that are augmented by appropriate educational leadership courses in planning the student's program. The specialist in education, doctor of education, and doctor of philosophy degrees in vocational education focus on planning, designing, and evaluating programs that improve vocational education in educational and industrial settings.

Admission Requirements

Specialist and Doctoral Degrees: 1) A master's degree from an accredited institution; 2) good standing at the institution of higher education last attended; and 3) two of the three following criteria: a) a score of at least 1000 on the GRE (applicants for admission to the PhD program must score at least 1050, while applicants for the EdD program must score at least 850); b) a 3.5 GPA in the master's program; or c) a 3.0 GPA in the last two years of undergraduate study.

Definition of Prefixes

EVT — Education: Vocational/Technical

Graduate Courses

EVT 5066. Philosophy and Principles of Comprehensive Vocational Education (3). Study of the underlying educational philosophy and principles of comprehensive vocational education.

EVT 5264. Organization, Administration, and Management of Vocational Education Programs (3). Concentration on specific topics such as management of vocational education programs, budget-finance, human resources, and accountability.

EVT 5265. Supervision and Development of Vocational Education Staff (3). Examination of major responsibilities of the local vocational supervisor involving typical problems, varied responsibilities, and effective techniques.

EVT 5267. Planning for Vocational Education (3). Introduction to concept and theory of planning, studies principles, practices, and issues related to planning education.

EVT 5664. Community Relations in Education (3). A course designed to develop knowledge, understanding, and skills in communications strategies for managing educational programs and marketing educational information.

EVT 5760. Designing Research in Educational Leadership (3). Basic concepts and techniques in research design, problem formulation, execution, and analysis, stressing application in educational leadership.

EVT 5905r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

EVT 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

EVT 5930r. Seminar in Vocational Education (1–3). Considers a variety of special topics concerning issues in vocational education as they evolve. May be repeated to a maximum of nine (9) semester hours.

EVT 5942r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) semester hours may apply to the master's degree.

EVT 5947r. Internship (1–8). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

EVT 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

EVT 6790. Evaluating Vocational Education (3). Encompasses evaluation theory and the application of evaluation strategies in vocational education.

EVT 6930r. Seminar in Vocational Research (1–3). (S/U grade only.) Comprehensive review and critique of current vocational research. Students also develop a literature review for dissertation prospectus or research proposal quality. May be repeated to a maximum of six (6) semester hours.

EVT 6980r. Dissertation (1–12). (S/U grade only.)

EVT 8964r. Preliminary Doctoral Examination (0).

EVT 8968r. Specialist in Education Comprehensive Examination (0).

EVT 8978r. Specialist in Education Thesis Defense (0).

EVT 8985r. Dissertation Defense (0).

HIGHER EDUCATION

The Florida State University program in higher education prepares individuals for positions of leadership in colleges and universities and related agencies whose activities impact higher education. Our overriding goal is to draw on and apply knowledge from the broad areas of organizational theory, student development, public policy, and teaching and learning to improve practice in colleges and universities. Graduates master a common core of knowledge about higher education. They develop high level inquiry skills, and skills in management and leadership. They become familiar with standards of professional practice in the leadership and administration of colleges and universities and define a code of professional ethics and values. Program outcomes are achieved through a combination of course work, mentorships, independent study, and clinical experiences designed to enhance leadership and inquiry skills and to explore ethical issues in decision making. In addition to preparing our students, we are committed to serving the continuing professional development needs of educators in colleges and universities and leaders in the policy community whose efforts include the improvement of education at all levels.

Degree programs lead to master of arts (MA), master of science (MS), specialist in education (EdS), doctor of education (EdD), or doctor of philosophy (PhD) degrees. A detailed description of the admissions requirements appears in the program's *Curriculum Guide*, which may be obtained by writing or calling the program coordinator. Inquiring students and applicants are encouraged to attend one of the two campus visiting days scheduled in December and March.

Students commonly elect one of two areas of concentrated study: student personnel administration, public policy or general administration. A common core of course work is required. Concentration is achieved through specialized electives, practica, and internships, and an outside minor field. The program is supported by the **Hardee Center for Women in Higher Education**, which promotes and arranges assistantships, maintains a resource center, and sponsors colloquia on a wide range of topics of current interest to leaders (male and female) in the higher education community.

The program in higher education benefits from the location of the University in the state capital. Students take advantage of opportunities to study state policy for higher education and to observe and work with some of the key boards and policymakers who are directly involved in system-wide leadership of the State of Florida, Division of Colleges and Universities and the Division of Community Colleges. A number of students also have served in legislative internships and with the Postsecondary Education Planning Commission.

The Florida State University campus and the array of resources available in state government provide a broad set of opportunities for basic and applied research and offer doctoral students a rich field in which to conduct their dissertation studies.

The Florida State University's program in higher education has earned a national reputation for excellence in professional training. Established in 1957, the program has been ranked among the top 10 in the United States during the past 15 years. The program is proud of the achievements of its graduates, many of whom have advanced to leadership positions as presidents and vice presidents of colleges and universities, key staff positions in state agencies, and whose presence is strong in a number of major professional and scholarly associations.

Requirements for Admission and Graduation

A special note on admissions: English-speaking students must complete the GRE; international students must complete the TOEFL with a minimum score of 550.

Master's Degree Program (MA or MS)

Admission to this program requires a 3.0 GPA (on a 4.0 scale) for the last two years of undergraduate courses or 1000 or higher on the GRE. Specialty areas for this degree include administration and student personnel services. Most students study full time, although part-time students are welcome. Most full-time students work part time as graduate assistants in the resident halls, student affairs offices, or other education offices or agencies. Applicants will be sent a list of assistantship possibilities. The master's degree in higher education is a two-year program. Students usually select the MS degree and the full-course option instead of a thesis-type program. Several internships are required for a master's degree; they may be taken at institutions elsewhere in the United States.

Education Specialist (EdS)

This advanced degree program may appeal to part-time students who are not currently interested in a doctoral degree, but who wish to complete a course of graduate study beyond the master's. Applicants for the specialist degree program must meet admission requirements for the doctorate. To receive the degree, the student must successfully complete thirty-three (33) semester hours of course work and pass a comprehensive examination. Additional information on specialist degree requirements may be obtained from the program coordinator.

Doctoral Degree Programs

The two doctoral degree programs, the EdD and PhD, are designed for persons with different career objectives. The EdD is designed especially for the higher education practitioner, the PhD for the basic researcher or policy analyst. The two degrees are differentiated by several factors: admissions criteria, diagnostic examination, outside minor credit hours, research training, and dissertation project. The EdD program is designed in two versions: one for the full-time student and a second for the part-time student.

The criteria for admission to the doctoral programs are similar except for the GRE scores. First, an applicant must have a master's degree from an accredited institution. Second, each applicant must meet two score criteria. An EdD applicant must meet two of these three criteria: 1) 3.0 GPA on the last two years of undergraduate degree courses, 2) a 3.5 on a master's or EdS degree program, or 3) a GRE score of 1000. An applicant for admission to the EdD program must present a minimum score of 850 on the combined verbal and quantitative sections of the exam. The PhD applicant must have a GRE score of 1050 and either a 3.0 on the last two years of the undergraduate program or a 3.5 GPA on a master's or EdS degree program.

The EdD program requires a minimum of forty-nine (49) semester hours of course work beyond the master's degree and twenty-four (24) semester hours of dissertation. The PhD program requires sixty-four (64) hours of course work. The

courses to be completed for both degree programs include those from the higher education core and elective areas, research methods, and those from outside the department. Meeting minimum requirements for admission is not a guarantee of admission to the program. Faculty making admission decisions consider a range of factors, including previous leadership experience in higher education.

College Teaching Certificate

This interdepartmental specialty is offered as an outside minor to students enrolled in any graduate degree program at the University. Special academic certification is available to those who successfully complete the course requirements. Individual courses are open to any student interested in exploring an aspect of college teaching.

Doctoral students who expect to teach in the lower division of a college or university will find this specialty of benefit. Emphasized here is the knowledge and practice of college teaching, curriculum analysis and development, and the means by which successful learning takes place among post-high school and adult college students.

For additional information, contact the coordinator of the higher education program.

Definition of Prefixes

ADE — Adult Education
EDA — Education: Administration
EDF — Education: Foundations
EDH — Education: Higher
SDS — Student Development Services

Graduate Courses

ADE 5075. University Continuing Education (3). Emphasis is on the design and implementation of continuing education.

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 5506. Organization and Administration of Higher Education (3). Prerequisite: EDH 5051. Basic principles of organization and administration in junior colleges, senior colleges, and universities.

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.

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 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 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 5068. Outcomes of Undergraduate Education (3). Prerequisites: EDF 5400; 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 5081. Leading Change in Higher Education (3). Prerequisite: EDH 5051. A philosophical study of contemporary problems in higher education.

EDH 5205. Curriculum in Higher Education (3). Prerequisite: EDH 5051. Curriculum development in community colleges, senior colleges, and universities.

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 5306. College Teaching: Teaching in the Subject Field (3). Prerequisite: EDH 5305. Application of a curriculum development to course design in the student's subject area.

EDH 5405. Legal Aspects of Higher Education (3). Comprehensive analysis of legal concepts, procedures, and considerations relevant to higher education.

EDH 5406. Ethics and Inquiry (1). Examines the basic principles of ethics and their application to leadership issues in higher education.

EDH 5504. College and University Institutional Advancement (3). Provides an overview of comprehensive institutional advancement including planning, institutional relations, educational fund-raising, alumni, government relations, foundations, and corporate relations.

EDH 5505. Finance in Higher Education (3). Fundamental considerations in the finance of institutions of higher education.

EDH 5630. Program Financial Management 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 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

EDH 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (12) semester hours.

EDH 5941r. Field Laboratory Internship (1–8). May be repeated to a maximum of twelve (12) semester hours.

EDH 5942r. Internship (1–8). (S/U grade only.) May be repeated to a maximum of twelve (12) 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 (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

EDH 5944r. Internship (1–8). (S/U grade only.) May be repeated to a maximum of twenty-four (24) semester hours. Master's candidates.

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 (6) semester hours is required.

EDH 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

EDH 6935r. Seminar: Literature, Research, and Professional Writing in Higher Education (3). (S/U grade only.) To assist graduate students in the preparation of a prospectus. May be repeated to a maximum of six (6) semester hours.

EDH 6980r. Dissertation (1–12). (S/U grade only.)

EDH 8964r. Preliminary Doctoral Examination (0).

EDH 8966r. Master's Comprehensive Examination (0).

EDH 8968r. Specialist in Education Comprehensive Examination (0).

EDH 8976r. Master's Thesis Defense (0).

EDH 8978r. Specialist in Education Thesis Defense (0).

EDH 8985r. Dissertation Defense (0).

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

Chair: Marcy Driscoll*; Professors:* Branson, Brewer, Driscoll, Kaufman, Keller, Morgan, Oosterhof, Pargman, Peterson, Reiser, Rollin, Sampson, Tenenbaum, Wager; *Associate Professors:* Kelly, Losh, Prevatt, Tate; *Assistant Professors:* Baylor, Darabai, Kamata; *Visiting Assistant Professors:* Jeong, Olina, Proctor*; Courtesy Professor:* Groomes; *Professors Emeriti:* Beard, Burck, Burkman, Dick, Fletcher, Foster, Gagne, Hills, Johnson, King, Lathrop, Mancha, Quinly

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, and industry. Specifically, the department's mission is to provide service to the college; prepare graduates for leadership roles in universities, school districts, state departments of education, educational research organizations, 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 are offered by the Department of Educational Psychology and Learning Systems:

Combined program in counseling psychology and school psychology

Counseling and human systems
School psychology

Educational psychology
Sports psychology

Educational research and testing
Research design and statistics

Evaluation and measurement
Research and evaluation

Instructional systems

Certificate in educational technology

Certificate in online instructional development

Certificate in program evaluation

Educational Psychology Program

The program offers master's, specialist, and doctoral degrees in four major areas: learning and cognition, measurement and statistics, program evaluation, 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 **program evaluation** major is interdisciplinary in nature and designed to ensure that the student is competent in evaluation theory, quantitative and qualitative methods, and the theoretical, organizational, and political nature of the context in which the student wishes to work. Graduates plan to work in various contexts such as instructional design, international education, communications, public administration, and adult education.

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.

Instructional Systems Program

The program offers the master's, specialist, and doctoral degrees in instructional systems. The master's and specialist programs focus on the establishment of skills in design, development, and evaluation. The doctoral program builds on the skills of instructional design included in the master's program and supplements them with knowledge of systems design, media analysis, and project management. An emphasis area in open and distance learning has been approved as a major within instructional systems and will be offered entirely at a distance. 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 admission in the Fall semester is preferred.

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** a score of 1000 on the Graduate Record Exam (GRE). A TOEFL score of at least 550 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 score of 1000 on the GRE, and a master's degree from a recognized institution. A TOEFL score of at least 550 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.

Definition of Prefixes

EDF — Education: Foundations
EDG — Education: General
EDP — Educational Psychology
EME — Education: Technology and Media
PET — Physical Education Theory
SYP — Social Processes

Graduate Courses

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 its equivalent. Multiway 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 Assesment (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 stratiegies, 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 unidimensional and multidimensional scaling techniques.

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 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). Designing and implementing, process, and outcome evaluation of innovative programs and program components.

EDF 5464. Qualitative Methods for Program Evaluation (3). Prerequisite: EDF 5461 or EDF 5481 (recommended). This course will develop 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 (12) semester hours.

EDF 5910r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of four (4) semester hours. A maximum of three (3) 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 (4) semester hours. A maximum of three (3) 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 (24) semester hours.

EDF 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

EDF 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

EDF 6479. Qualitative Data Analysis (3). Prerequisite: EDF 6475 or equivalent. This course focuses on the analysis, interpretation, and reporting of qualitative data collected during interpretive research.

EDF 6930r. Research and Evaluation Seminar (1–2). (S/U grade only.) Problems and issues in educational research, evaluation, measurement, and statistics. Topics vary. May be repeated to a maximum of eight (8) semester hours. Four (4) semester hours are required for doctoral in evaluation, and eight (8) in other program tracks.

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 (15) 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).

EDF 8966r. Master's Comprehensive Examination (0).

EDF 8969r. Specialist in Education Comprehensive Examination (0).

EDF 8976r. Master's Thesis Defense (0).

EDF 8979r. Specialist in Education Thesis Defense (0).

EDF 8985r. Dissertation Defense (0).

EDG 5932r. Seminar in Instructional Design (1). (S/U grade only.) Faculty members and other instructional systems specialists present lectures on current topics and projects. Required once of master's students and twice of doctoral students. Offered spring semester only.

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. The instructional strategies used for the course will model those that are introduced and studied within the course.

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 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. Instructional Materials Development (4). Prequisites: EDP 5216, EME 5603. Advanced in-depth treatment of procedures for the systematic design and development of instructional materials. Includes practice in the design and development of an instructional product.

EDP 5216. Theories of Learning and Cognition in Instruction (3). Applications 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). Discusses the physical, cognitive, social, emotional, moral, motivational, personal, and sex-role development of children and adolescents during the years of schooling, and in the context of school behavior and its influences. Emphasis on the role of school practitioners.

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.

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 5403. Collaborative Learning Online (3). Examines the issues involved in designing, organizing, and teaching on-line courses using asynchronous, text-based, computer-mediated communication (CMC) within a collaborative learning perspective. Participants will experience and assess the utility of a variety of CMC Software.

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 5408. Application of Technology in Teaching (3). Students will develop and use educational technology in a real-classroom setting.

EME 5456. Researching the Literature in Open and Distance Learning (3). Provides participants with a broad understanding of the main areas covered by the research literature in open and distance education, and the sources available. Participants will search literature sources, and assess the quality and characteristics of the research on open and distance learning.

EME 5457. Introduction to Distance Learning (3). This course provides an overview of the foundations of distance learning and on-line 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. Includes experience both as a designer and a subject-matter expert.

EME 5608. Trends and Issues in Instructional Design (3). Overview of the field of instructional 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 (12) semester hours.

EME 5975. Portfolio Review (0). Students will prepare a portfolio demonstrating that they are skilled in the use of technology in both classrooms and schools.

EME 6313. Analysis and Application of Web-Based Instructional Delivery Systems (3). Provides participants with knowledge of and hands-on experience with web-based instructional delivery tools, techniques, and technology. Topics include hypertext, searching and organizing information on the web, and web-based instructional design.

EME 6326. Development of Print Courseware (3). Prerequisite: EME 5603 or EDG 6925. Procedures for the systematic design and production of instructional materials in the print medium. Includes practice in design and production of print-based instructional materials.

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 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). Course includes the description of the design and use of currently available 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 (6) semester hours.

EME 6636. A Systems Approach to the Management of Change (3). Addresses the processes and impact of planned change on individuals, groups, organizations, and society. Explores major issues and published results of change in the context of general systems theory.

EME 6691. Performance Systems Analysis (3). Introduction to assessment techniques used to identify training and nontraining needs. Projects include needs assessment, analysis, solution selection, and job and task analysis.

PET 5206C. Youth in Sport (3). An examination of the role of youth in American sport from the perspectives of social, developmental, and experimental psychological theory. Offered alternate years.

PET 5215. 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 5216. Sports Psychology (3). Growth and development, personality and social factors, practice, and training as they relate to the athlete and coach.

PET 5219. Applied Sport and Exercise Psychology (3). Prerequisites: PET 5216, 5235C. Emphasis in this course is based upon techniques and strategies for changing sport and exercise psychology as well as their theoretical bases.

PET 5255. Social Bases of Physical Activity (3). An examination of sociocultural 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.

PET 6297. Seminar in Sport Psychology (3). Prerequisite: PET 5216. Discussion of contemporary topics, with reference to theory, research, and practical situations. Offered alternate years.

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 SERVICES IN EDUCATION

Coordinator: Gary W. Peterson

The psychological services program offers work leading to the following degrees: doctor of philosophy (PhD) in the combined program in counseling psychology and school psychology, doctor of philosophy in rehabilitation services, a combined specialist in education (EdS) and master of science (MS) in counseling and human systems, and master of science (MS) in rehabilitation counseling.

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 and rehabilitation facilities, 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 in 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 The Florida State University is accredited by the American Psychological Association as a Combined 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 (72) semester hours. A supervised internship in an applied setting is also required. Students majoring in counseling and human systems at the EdS/MS level select a specialization in career counseling, mental health counseling, and/or school counseling. Each of these specializations are accredited by the Council for Accreditation of Counseling and Related Educational Programs 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

School psychology is offered as a separate major within counseling and human systems. It prepares personnel to practice as school psychologists within educational as well as nontraditional settings. This major leads to either certification by the state Department of Education or licensure as a school psychologist by the Agency for Health Care Administration.

Human Services Center

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, as well as school psychologist services to members of the community under direct faculty supervision as part of their clinical training.

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. 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 The Florida State University (send to office of graduate admissions), 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 Services in Education, 215 Stone Building, The Florida State University, Tallahassee, FL 32306-4458.*

Definition of Prefixes

MHS — Mental Health Services
PCO — Psychology for Counseling
PSB — Psychobiology and Neuroscience
SDS — Student Development Services
SPS — School Psychology

Graduate Courses

Psychological Services in Education

MHS 5005. Foundations of Counseling and Rehabilitation (3). Identification of the foundations underlying counseling and rehabilitation, including background philosophy, structure, and legislation.

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 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 (16) semester hours.

MHS 5860r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) semester hours may apply to the master's degree.

MHS 5905r. Directed Individual Study (1–3). May be repeated to a maximum of twelve (12) semester hours.

MHS 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (12) semester hours.

MHS 6300. Theories of Vocational Behavior (3). Meaning of work, theories of vocational behavior, career development consultation.

MHS 6401. Individual Counseling Theories (3). Consideration of the nature of theory and instruction in a variety of counseling theories.

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 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 (16) 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 (18) 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 (9) semester hours. May be repeated in the same semester.

MHS 6970r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

MHS 6971r. Master's Thesis Defense (0).

MHS 6973r. Specialist in Education Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

MHS 7962r. Specialist in Education Comprehensive Examination (0).

MHS 7972r. Specialist in Education Thesis Defense (0).

MHS 8960r. Master's Comprehensive Examination (0).

MHS 8961r. Preliminary Doctoral Examination (0).

MHS 8980r. Dissertation (1–12). (S/U grade only.)

MHS 8981r. Dissertation Defense (0).

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 6855. Historical, Ethical, and Legal Aspects of Counseling Psychology (3). An examination of historical, ethical, and legal issues in counseling psychology.

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 (6–12). (S/U grade only.) Field practical experience in a planned setting. May be repeated to a maximum of eighteen (18) 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: Permission of instructor. 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 permission of instructor. Assessment of educational problems utilizing standardized and nonstandardized 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 (2). (S/U grade only.) Corequisite: SPS 5105. An assessment course and concurrent or prior enrollment in SPS 5105 or equivalent. Focuses on activities related to collection, interpretation and reporting of assessment data of emotional, social, and behavioral problems of children and adolescents.

SPS 5615. Counseling Children and Adolescents (3). 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 (12) 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 (18) semester hours.

Department of ELECTRICAL AND COMPUTER ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Chair: Reginald Perry; *Professors:* R. Arora, Perry, Simons, Thagard; *Associate Professors:* K. Arora, Cockburn, Foo, Gross, Kwan, Roberts, Tung, Zheng; *Assistant Professors:* Baldwin, Harvey, Weatherspoon; *Visitng Professor:* McLaren; *Visiting Associate Professor:* Li; *Visiting Assistant Professors:* Kim, A. Meyer-Baese, U. Meyer-Baese; *Assistants in Electrical Engineering:* Brooks, Imen

Electrical engineering is concerned with the development and utilization of electrical and electronic technology for the benefit of society. It involves the design, development, and implementation of devices, circuits, and systems that are used in electrical power generation and distribution, machine control, communications, computers, and computer-based information processing. It is a very broad field that affects all aspects of modern society, particularly in this age of information processing, communications, and automation.

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 course work 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 to demonstrate how professionals make major contributions to the electrical engineering field.

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 Opportunities

The department maintains well-equipped research laboratories in its areas of interest. Included are a computer security research laboratory, robotics and computer vision laboratory, electromagnetics research laboratory, applied laser laboratory, high-performance computing and simulation research laboratory, opto-electronics and optical systems laboratory, information processing and transmission engineering research laboratory, wireless intercommunications laboratory, and sensor system research laboratory.

The department 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 a thesis program 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 (30) semester hours is required for the master's degree.

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 (60) 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 (60) 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.

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

All master of science (MS) 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.

Course Work and Thesis Requirements

All master of science (MS) students must complete a minimum of thirty (30) semster hours of course work to satisfy the master of science (MS) degree in electrical engineering requirements. Twelve (12) semester hours are required from the student's depth area, twelve (12) semester hours in supplemental electives and a minimum of six (6) semester hours are required for the thesis (EEL 6971r). A minimum of three (3) semester hours of supplemental electives should be a course in advanced mathematics, typically a 5000-level course, or a departmental approved substitute. The master's candidate may take up to six (6) semester hours of S/U credits with the approval of the faculty advisor and the ECE graduate coordinator. A master's degree candidate may also take one to two 4000-level courses for letter grade credit beyond those required for a baccalaureate degree with approval of the ECE graduate coordinator.

Students must select their major professors by the end of the first semester of course work and are required to submit a plan of study by the time they have completed twelve (12) 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) students are required to register for EEL 8976, Master Thesis Defense, and at least one (1) semester hour of EEL 6971r, Thesis, during the semester they plan to graduate.

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.'

Conference Paper Submission Requirement

All master of science (MS) students are required to submit at least one conference or journal paper to a conference or journal in their field of interest before their graduation will be approved.

Doctor of Philosophy

Admission to the Program

A bachelor's or master's degree in electrical engineering or a closely related descipline 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.

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 postbaccalaureate 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 logically 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 normally 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

Electical and Computer Engineering office by the end of the prior semester. Two repeat attempts 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

After successfully completing the doctoral preliminary examination, completing the requirement for supervised research (if not waived) and after completing substantially all required courses, the student will prepare and present to the supervisory committee the proposed dissertation topic.

Doctoral Proposal Examination

This is an oral examination given to the student at the time of the presentation of the 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

There are no specific courses required for the program. Each student's courses are defined by the plan of study, which is approved by the supervisory committee. The general requirements are:

1. Completion of a minimum of thirty-six (36) semester hours beyond those applied to the satisfaction of other degrees. A minimum of thirty (30) semester hours must be completed on a letter grade basis, up to six (6) semester hours can be completed on a S/U basis, for a total of thirty-six (36) semester hours (minimum). All work completed to satisfy PhD degree coursework requirements must be 5000-level or above. These also must include six (6) 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 towards any other degrees;

2. Completion of three (3) 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; and

3. Completion of twenty-seven (27) semester hours (minimum) of dissertation research, EEL 6980r.

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 Prefix

EEL — Electrical Engineering

Graduate Courses

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 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 5315. Digital Integrated Circuit Design (3). Prerequisite: EEL 4301. Design of digital integrated circuits, applications, solid state device switching characteristics, memory, computer aided design, and layout.

EEL 5317. Power Electronics (3). The purpose of this course is to develop a basic understanding of using switched electronic circuits for the conversion and regulation of electric power. The course focuses on the basic converters and their steady state analysis. Dynamic modeling analysis, controller design, power semiconductor device, and simulation also are covered.

EEL 5333. Solid State Sensors (3). Prerequisite: EEL 3300. Topics in this course include fabrication, characterization, operational principles, and applications of solid state sensors including acoustic, mechanical, magnetic, radiation, thermal, chemical, and biologic sensors.

EEL 5378. Mixed Signal ICs (3). Prerequisite: EEL 5315. This course introduces mixed signal processing using analog and digital integrated circuits. Topics include fundamentals of sampled data systems, nonlinear and dynamic analog circuits, Nyquist-rate data converters, over-sampling data converters, and digital filters, as well as use of computer-aided-design programs.

EEL 5416. Sonar (3). 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 5443. Electromagnetics and Optics (3). Prerequisite: EEL 3473. This course will cover a number of topics, including basic electromagnetic wave theory - Maxwell's equations, plane waves, energy and power flow; geometrical optics; applications to optical systems, optical fibers, and resonators; wave propagation in layered media; applications to lasers and integrated optics; quantum theory of lights; blackbody radiation; introductory quantum electronics; and other selected research topics.

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; arays-uniformly spaced, nonuniform, 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; reliabilty analysis; and system performance modeling.

EEL 5547. Radar (3).

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 ration (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 5617. Multivariable Control (3). Prerequisite: EEL 4652. Course covers H_2 and $H\infty$ control design for linear systems with multiple inputs and multiple outputs. Globally optimal techniques, fixed-structure (e.g., reduced-order) techniques. Includes introductory concepts in robust control.

EEL 5630. Digital Control Systems (3). Prerequisite: EEL 4652. Discrete system modeling, frequency-domain and z-plane root-locus design techniques, system compensation, with an emphasis on utilizing computer application packages.

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 permission of instructor. 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). This course is designed to provide students with an in-depth knowledge of advanced topics in nueral 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 (6) semester hours.

EEL 5910r. Supervised Research (1–5). (S/U grade only.) Prerequisite: Graduate standing. Requires departmental approval. Cannot be used as credit toward degree. May be repeated to a maximum of three (3) semester hours for candidates in master's degree, and five (5) 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 (12) 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 (3) semester hours for candidates in master's degree, and five (5) semester hours for candidates in doctoral degree.

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 6353. Semiconductor Device Theory (3). Prerequisite: EEL 3300 or equivalent. Topics in this course include elementary quantum physics, energy band theory, carrier properties, theory of p-n junctions, optoelectronics diodes, bipolar junction transistors, and field effect transistors.

EEL 6457r. Advanced Topics in Optoelectronic Systems (3). Typical offerings include: waves and fields in electro-optics; modern optics and coherence; optical data processing; nonlinear optics; laser technology; electro-optical circuits and systems for signal processing; electro-optical devices. May be repeated to a maximum of twelve (12) semester hours.

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 6558r. Advanced Topics in Digital Signal Processing (3). Typical offerings include: advanced digital signal processing; fast DSP algorithms; image processing; data compression; computer vision; pattern recognition; VLSI based DSP design; advanced signal and systems theory. May be repeated to a maximum of twelve (12) semester hours.

EEL 6619. Robust Control (3). Prerequisite: EEL 5617. Course covers control design for systems with uncertain dynamics; robust H∞ design; structured singular value synthesis; LMI and Riccati equation solution techniques.

EEL 6708. ASIC Systems Design II (3). Prerequisite: EEL 5707. Course covers MOS transistor theory, CMOS logic gate design, ASIC standard cell library design, ASIC partitioning, floorplanning and placement. Introduction to routing algorithms and test methods.

EEL 6799r. Advanced Topics in Computer Engineering (3). Typical offerings include: digital systems design; advanced computer architecture; local area networks; telecommunication networks; data and computer communications; queuing systems; artificial intelligence; expert systems; distributed computer systems; artificial neural networks; automata theory. May be repeated to a maximum of twelve (12) semester hours.

EEL 6905r. Directed Individual Study (1–3). Prerequisite: Graduate standing. May be repeated to a maximum of six (6) semester hours.

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 (12) semester hours.

EEL 6932r. Electrical and Computer Engineering Seminar (0). (S/U grade only.) May be repeated to a maximum of ten (10) times. Presentations by faculty, students and visiting scholars. All full-time graduate students must enroll each semester.

EEL 6971r. Master's Thesis (1–6). (S/U grade only.) Prerequisites: Graduate standing, instructor permission. A minimum of six (6) 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 (48) semester hours.

EEL 8964. Preliminary Doctoral Examination (0). (S/U grade only.)

EEL 8966r. Master's Comprehensive Examination (0). (S/U grade only.) May be repeated to a maximum of two (2) times.

EEL 8976. Master's Thesis Defense (0). (S/U grade only.)

EEL 8985r. Dissertation Defense (0). (S/U grade only.) May be repeated to a maximum of three (3) times.

ELEMENTARY EDUCATION
see Elementary and Early Childhood Education

Department of ELEMENTARY AND EARLY CHILDHOOD EDUCATION

College of Education

Chair: Vivian Fueyo; *Professors:* Flake, Fueyo, Hansen, Palmer, Scott-Simmons, Wolfgang; *Associate Professors:* Clark, Jones, McCarty-Roberts (Panama City), Piazza; *Assistant Professors:* Almarza, Lake, Lundeen, Rice; *Assistants in Elementary Education:* Davis (Panama City), Rios (Panama City); *Professors Emeriti:* Green, Hafner, Kirby, Kirtland, Schluck, Scott

There are three major areas of specialization in the Department of Elementary and Early Childhood Education: early childhood education, elementary education, and reading and language arts education.

The primary mission of the Department of Elementary and Early Childhood is threefold: first, to conduct research that provides new knowledge for the improvement of practice in educational settings through the ongoing publication of basic and applied educational research, the dissemination of research findings at scholarly conferences, and the seeking of external research funding; second, to provide excellence in the preparation of educators at the graduate level in the fields of early childhood education, elementary education, and reading and language arts. This includes the development of doctoral students for leadership roles in educational research and policy, teacher education, instructional design, and public schools, as well as providing the education of master's students for leadership roles as curriculum specialists, master teachers, and teachers as researchers; third, to provide service to educational institutions and government agencies through the in-service training of teachers, leadership in professional organizations at the state, national, and international levels, and responsiveness to state, national, and international requests that relate to the departmental mission.

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 Teacher Preparation Programs and State Board of Education Rule 6A-5.066, Approval of Preservice Teacher Preparation Programs.

The following are offered by the Department of Elementary and Early Childhood Education:

Early childhood education

Elementary education

Reading education and language arts

EARLY CHILDHOOD EDUCATION

Professor: Wolfgang; *Associate Professor:* Jones; *Assistant Professor:* Lake

The early childhood education program offers graduate studies 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 3 (or age 8) in public and private schools, early childhood centers, or similar educational institutions. State certification requirements can be met in an expanded master's program for those wishing initial certification. To complete this program, students must also be admitted to teacher education, described in the "College of Education" entry of this *Graduate Bulletin.*

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 course work emphasis in the following areas: research, theory base for childhood education, evaluation, curriculum, instruction, special field experience, practicums, 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 science 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 baccalaurate 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.

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 course work 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; and 5) a statement of professional objectives.

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.

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 Department of Elementary and Early Childhood Education.

Definition of Prefix

EEC — Education: Early Childhood

Graduate Courses

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 (12) semester hours.

EEC 5911r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (9) semester hours.

EEC 5942r. Supervised Teaching (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

EEC 5947. Field Laboratory Internship (1–8). (S/U grade only.)

EEC 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) 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 insure optimum development.

EEC 6672. Theory and Research in Young Children's Play Curriculum (3). Prerequisite: EEC 5269 or permission of instructor. 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).

EEC 8966r. Master's Comprehensive Examination (0).

EEC 8968r. Specialist in Education Comprehensive Examination (0).

EEC 8976r. Master's Thesis Defense (0).

EEC 8978r. Specialist in Education Thesis Defense (0).

EEC 8985r. Dissertation Defense (0).

ELEMENTARY EDUCATION

Professors: Flake, Fueyo, Hansen; *Associate Professors:* Clark, McCarty-Roberts (Panama City); *Assistant Professors:* Almarza, Lundeen, Rice; *Assistants in Elementary Education:* Davis (Panama City), Rios (Panama City)

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. Course work and field experiences prepare graduates with specializations appropriate for educating children, grades 1 through middle school. Elementary education graduate work includes curricula leading to the master's, specialist, and doctoral degrees. The Panama City campus only offers the master's degree.

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 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 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 16 can 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 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.

Curricula

Two types of programs are offered: 1) For students who are already certified in elementary education, thirty-two (32) semester hours and a comprehensive exam or thesis is required. Course work includes a **minimum** of twelve (12) semester hours in elementary curriculum, teaching, and learning; fifteen (15) semester hours in content specializations; three (3) semester hours in computer education; and three (3) semester hours in educational foundations. Students may write a thesis that will substitute for up to six (6) semester hours of course work; 2) For students seeking initial certification in elementary education, an extended degree program of fifty-one (51) semester hours, including fourteen (14) 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 degree (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 course work, 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.

Curricula

For the specialist degree, a thirty-two (32) 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 computer education. Students are encouraged to write a thesis in lieu of a comprehensive exam, which may substitute for up to six (6) hours of course work.

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 course work 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.

Curricula

The program of study leading to a doctor of philosophy degree in elementary education requires a minimum of forty-eight (48) semester hours of course work, twenty-four (24) semester hours of dissertation credit, and satisfactory completion of a qualifying exam, comprehensive exam, and oral defense of the dissertation. The course work includes a nine (9) semester-hour core of doctoral courses in elementary education; a fourteen to eighteen (14–18) semester hour core in research design and qualitative and quantitative methods; and an interdisciplinary cognate specialization in two areas of elementary education. Students may substitute course work in a content field such as language arts, mathematics, reading, science, or social studies for one cognate specialization.

Definition of Prefix

CGS — Computer General Studies
EDE — Education: Elementary
EDS — Education: Supervision
MAE — Mathematics Education

Graduate Courses

CGS 5112. Using Computer Graphics as an Instructional Tool (3). Prerequisites: CGS 2160, MAS 2103; Corequisite: COP 3001 or permission of instructor. 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 permission of instructor. 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 (9) 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 5346. Technology in Elementary and Middle School (3). Prerequisite: Graduate standing or permission from instructor. 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 5526. Systematic Procedures of Observation (3). Techniques for observing student, teacher, and classroom activities and for helping teachers use such data to improve their own behavior.

EDE 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

EDE 5910r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (9) 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 (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

EDE 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

EDE 5973r. Specialist in Education Thesis (1–6). (S/U grade only.)

EDE 6805. Perspectives of Teacher Professional Development (3). For advanced graduate students preparing for leadership positions associated with professional development of teachers at preservice, induction, and inservice levels. Model programs will be 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 (9) 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).

EDE 8966r. Master's Comprehensive Examination (0).

EDE 8968r. Specialist in Education Comprehensive Examination (0).

EDE 8976r. Master's Thesis Defense (0).

EDE 8978r. Specialist in Education Thesis Defense (0).

EDE 8985r. Dissertation Defense (0).

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 (4). A study of mathematics learning, mathematics teaching strategies, and mathematics curriculum in elementary school mathematics.

MAE 5655. Computers in Mathematics Education (3). Prerequisites: CGS 2160 and six (6) semester hours of 2000 or above mathematics. A study of methods and techniques for using the computer in mathematics education and/or precollege mathematics classroom instruction.

READING AND LANGUAGE ARTS

Professors: Palmer, Scott-Simmons; *Associate Professor:* Piazza

The primary goal of reading education and language arts is to prepare professionals to work at various levels of instruction, early reading and writing development, K–12 school literacy, postsecondary reading programs, and adult literacy programs, as well as the preparation of college and university teacher educators in the area of literacy.

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 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's of science 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 850 on the Graduate Record Examination (GRE); 3) certification in a field of education; and 4) successful teaching experience.

Curricula

The specialization in reading education and language arts leading to the master's degree requires thirty-three (33) semester hours of course work, including a core of five required reading certification courses and six additional courses to fulfill the master's degree.

Specialist in Education

The specialist in education 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 (6) 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 course work, or a minimum score of 850 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.

Curricula

The program of study leading to the specialist in education degree in reading education requires a minimum of thirty-three (33) semester hours of course work including from fifteen to eighteen (15–18) 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, sociology, or anthropology. From a disciplinary perspective, students select a content specialization such as reading theory, comprehension, children's literature, written composition, or adult literacy and address it from the standpoint of teaching and learning, development, or policymaking. Students study key research in the selected field of study, practice appropriate inquiry methods, and demonstrate the capacity to carry out independent scholarly investigation. The program is designed for persons aspiring to be college professors, scholars, researchers, or educational policymakers.

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 course work, 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.

Curricula

The program of study leading to the doctor of philosophy degree in reading education requires forty-eight to fifty-eight (48–58) semester hours of course work and twenty-four (24) semester hours of dissertation credit. The course work includes research design and methods courses, foundation courses, a required core of twelve (12) 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 intergrating 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 14 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 (9) 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). A course to help 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 4510 or 5147. Review of various types of reading problems and techniques for diagnosing these problems. Study of 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 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 (12) semester hours.

RED 5911r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (5) semester hours. A maximum of three (3) 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 (6) 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 (9) semester hours.

RED 6980r. Dissertation (1–12). (S/U grade only.)

RED 8964r. Preliminary Doctoral Examination (0).

RED 8966r. Master's Comprehensive Examination (0).

RED 8968r. Specialist in Education Comprehensive Examination (0).

RED 8976r. Master's Thesis Defense (0).

RED 8978r. Specialist in Education Thesis Defense (0).

RED 8985r. Dissertation Defense (0).

Department of ENGLISH

College of Arts and Sciences

Chair: Hunt Hawkins; *Eppes Professor:* Butler; *Griffith T. Pugh Professor:* Bickley; *Kellogg W. Hunt Professor:* Bishop; *Fred L. Standley Professor:* Fenstermaker; *George M. Harper Professor:* Lhamon; *Francis G. Townsend Professor:* Ortiz-Taylor; *William Hudson Rogers Professor:* McElrath; *Sarah Herndon Professor:* Gontarski; *Bertram H. Davis Professor:* Boehrer; *Janet Burroway Professor:* Winegardner; *McKenzie Professor:* Kirby; *Daisy Parker Flory Alumni Professor:* Standley; *Professors:* Berry, Crook, Fowler, Hawkins, O'Rourke, Rowe, Suarez; *Associate Professors:* Burke, Dickson-Carr, Gardner, Johnson, Laughlin, McGregory, Montgomery, Moore, Saladin, Walker; *Assistant Professors:* Cooper, Edwards, Epstein, Faulk, Goodman, Kimbrell, North, Picart, Poster, Shinn, Stuckey-French, Vitkus; *Professors Emeriti:* Burroway, Davis, Harper, Hunt, Pugh, Randel

The Department of English offers work leading to the master of arts (MA) and doctor of philosophy (PhD) degrees. Reflecting the transformation of The Florida State University into a comprehensive research institution at the close of World War II, the first MA in English was awarded in 1945 and the first PhD in 1955. In the subsequent half-century, hundreds of our graduates have filled teaching and research positions in colleges and universities throughout the nation. The department is a charter member of the South Atlantic Graduate English Cooperative, an organization of 13 MA and PhD degree-granting institutions in the region. Each year a number of students in the department hold University Fellowships, College Teaching Fellowships, or McKnight Fellowships for minority students.

Trained at premier research institutions throughout North America and Europe, faculty members—including one Eppes Professor, two McKenzie Professors and a Daisy Parker Flory Alumni Professor—are accomplished teachers and scholars. Twenty faculty 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 have produced nationally acclaimed textbooks in both fiction and poetry. Faculty research regularly appears in books published by distinguished university presses as well as the foremost journals in the profession, 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).*

Most students in the MA and PhD programs emphasize literature, creative writing, or rhetoric, but the department offers course work and degree options in a number of related fields such as popular culture, folklore, critical theory, and film studies. Faculty and graduate students participate in a variety of interdisciplinary programs such as American studies and humanities, and the department is the administrative home of an interdisciplinary certificate program in critical theory (see the "Critical Theory" entry in this *Graduate Bulletin* for a full description of this program).

In the MA program, students elect literature, writing, or rhetoric concentrations; all writing students produce a thesis, but literature students may elect a thesis track or an examination track. All PhD students satisfy core requirements in literature, research methods, language study, and literary theory; students then take comprehensive 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 who normally conduct two sections of freshman English each semester, in addition to enrolling in at least eight (8) semester hours of course work. These teachers are supported in their work by faculty supervisors. New assistants without previous teaching experience participate in a teacher-training program during the summer term preceding their appointment, for which they receive a modest stipend; this program is taught by faculty specialists in rhetoric and composition, and it trains teachers not only for classroom instruction but also for tutorial instruction in the department's **Reading/Writing Center**. Two computerized classrooms allow graduate students to teach computer-assisted writing.

Various activities and facilities are available to all graduate students. Two literary magazines, *The Kudzu Review* and *Sundog: The Southeast Review*, are published in the department, and several scholarly journals are edited by faculty, in-

cluding *Frank Norris Studies* and *The Journal of Beckett Studies*. Many students gain journalistic experience by writing for the independent campus newspaper. The writing program sponsors readings one evening a week in the community and an annual Spring Writer's Festival, and the department also sponsors the World's Best Short Short Story contest, which attracts thousands of entries from around the world. Each fall, the English Colloquium features lectures by Florida State University and guest experts in literature and scholarship, and a number of graduate students present their first scholarly paper at the annual Florida State University Film and Literature conference, which brings scholars throughout the nation to the campus each year.

The department annually recognizes outstanding achievement 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 will normally be admitted to begin course work in the Fall term. To be considered for Fall admission, completed applications must be on file in the Department of English by February 1st.

College Requirements

Please review all college-wide degree requirements in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Master's Program 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 average of at least 3.0; 2) a combined score of 1000 on the verbal and quantitative portions of the Graduate Record Examinations (GRE) with at least 500 on the verbal section (applicants in literature should also submit a score for the Graduate Record Subject Test in English literature); 3) three letters of reference assessing the applicant's potential to do master's level work in English; and 4) a writing sample. **These are minimum criteria, and meeting them does not guarantee admission.**

A candidate for the master of arts in English may elect to emphasize literature, writing, or rhetoric. To insure 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 in English, students must satisfy the following requirements:

1. Earn thirty-three (33) credit hours 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 by any one of several means approved by the department; and

3. Satisfactorily complete a final requirement as follows:

   a. Students emphasizing literature must either perform satisfactorily on the master's comprehensive examination or satisfactorily complete and defend a thesis;

   b. Students emphasizing writing or rhetoric must satisfactorily complete and defend a thesis.

At least twenty-seven (27) semester hours must be taken on a letter-grade basis. With the permission of the director of graduate studies, up to six (6) 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 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 (6) 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

Master's students who choose to emphasize literature will complete thirty-three (33) semester hours of course work, to include the following:

1. Two courses in the literature of Great Britain and Ireland before 1800;

2. One course in the literature of Great Britain and Ireland after 1800;

3. One course in United States literature;

4. One literature course whose chief organizing principle is race, class, gender, sexual orientation, or ethnicity; and

5. One course in literary theory, from the following: ENG 5028, 5049r, 5048, 5057, and ENG 6939 or HUM 6939 when the topic is theory; fifteen (15) additional hours of course work, six (6) of which may, with the permission of the Director of Graduate Studies in English, be outside the department. Students electing to write a thesis count six (6) hours of thesis work toward the degree.

As a final requirement, students emphasizing literature must either complete and defend a thesis or perform adequately on the master's comprehensive examination. All students electing to write a thesis must submit a prospectus to their major professors and supervisory committees for approval and file the approved prospectus with the Director of Graduate Studies in English before proceeding with the thesis. Students electing the master's comprehensive examination will normally take the examination during the semester in which they are completing their course work. The master's comprehensive examination is a four-hour exam made up of three parts: part I—brief essay questions based on a departmental reading list; parts II and III—essay questions not restricted to the reading list. Students who fail the examination may repeat it during a subsequent semester. If they fail it a second time, the Director of Graduate Studies may be petitioned for permission to take another examination. For further details about the thesis prospectus, completion and defense of the thesis, or the master's comprehensive examination, see the Director of Graduate Studies in English.

Master's Program in English With an Emphasis in Writing

Students who qualify and who wish to obtain the master of arts in English with an emphasis in writing must have, by the end of the second semester in the program, a faculty adviser who is a member of the writing staff and who will, with the student, plan an overall program. In addition, the student must complete the following:

1. Fifteen to eighteen (15–18) semester hours of work in writing.

   a. Nine to twelve (9–12) semester hours of a combination of at least two of the following courses:

CRW	5130r	Fiction Workshop (3)
CRW	5331r	Poetry Workshop (3)
CRW	5430r	Drama Workshop (3)
ENC	5317r	Article and EssayWorkshop (3)

The four workshops in writing (CRW 5130r, 5331r, 5430r; ENC 5317r) may be repeated for credit with the permission of the instructor. The student will enroll in courses for writing credit during at least three different semesters, unless exempted with special approval.

   b. Six (6) semester hours will be devoted to writing a thesis.

2. Fifteen to eighteen (15–18) semester hours in literature and related courses.

As a final requirement, students emphasizing writing will complete and defend a thesis in fiction, poetry, drama, or the essay. Before proceeding with the thesis, the student must submit a prospectus and a writing sample (in the same genre as the intended thesis) to a supervisory committee consisting of a major professor and at least two other English faculty members, all of whom must be members of the graduate faculty. The student should have this committee formally constituted not later than the end of the third semester in the program. The prospectus of the thesis must be submitted at least a full semester before the

student's projected graduation date, and the student should consult departmental guidelines on prospectus writing in advance of submission. The thesis itself will be a single piece of writing or a collection of writings of a length deemed adequate by the committee. The thesis may originate in any of the student's writing courses but in its entirety it shall not have satisfied a course requirement.

Master's Program in English with an Emphasis in Rhetoric

Master's students who choose to emphasize rhetoric will complete thirty-three (33) semester hours of course work, to include:

1. At least twelve (12) hours of course work in rhetoric, from the following: ENC 5700, 5720; ENG 5028; LAE 5370, 5946; and ENG 5933 or ENG 6939 when the topic is rhetoric;
2. Six (6) hours of thesis credit; and
3. Fifteen (15) additional hours of course work.

Doctoral 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) a combined score of at least 1000 on the verbal and quantitative portions of the GRE, with at least 500 on the verbal section (applicants in literature should also submit a score for the Graduate Record Subject Test in English literature); 3) three or more letters of reference assessing the applicants potential to do doctoral work in English; and 4) a writing sample. **These are minimum criteria, and meeting them does not guarantee admission.**

In order to obtain the doctoral degree, students must successfully complete all course work (at least twenty-seven [27] semester hours, excluding dissertation credit, beyond the MA degree) with an overall GPA of 3.5 or better; complete the foreign language requirement; 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 [24] semester hours). Although all PhD students must take a minimum of twenty-seven (27) hours of course work beyond the MA, any or all of the specific course requirements listed below (except the six [6] hour seminar requirement) may be waived, based on an evaluation of MA course work.

Each student must form a supervisory committee consisting of a major professor, two other members from the English department, and a representative from a related area. The major professor, the college representative, and one other committee member must have doctoral directive status; all must be members of the graduate faculty.

Each student seeking a doctorate in English must complete the language requirement before taking the preliminary examination. The language requirement may be met by means of either: 1) a reading knowledge of two languages other than English approved by the students supervisory committee and demonstrated by any of the several means approved by the department, or 2) a high-level command of a single foreign language approved by the student's supervisory committee and demonstrated by achieving a satisfactory grade in a graduate-level literature course in the foreign language or in some other manner approved by the Director of Graduate Studies.

The following are specific course requirements for the doctor of philosophy degree:

1. ENG 5009 (or an equivalent approved by the Director of Graduate Studies);
2. One course in language and linguistics, from the following: ENG 5068r, ENL 5206r, ENL 5216r, ENG 6939 (when the topic is language and linguistics);
3. One course in literary theory, from the following: ENG 5049r, ENG 5048, ENG 5028, ENG 5057, ENG 6939/HUM 6939 (when the topic is theory);
4. One literature course in each of four areas:
   a. The literature of Great Britain and Ireland before 1800;
   b. The literature of Great Britain and Ireland after 1800;
   c. United States literature; and
   d. A literature course whose chief organizing principle is race, class, gender, sexual orientation, or ethnicity;
5. Two seminars, taken at The Florida State University at the PhD level (students planning a creative dissertation must take at least one writing seminar, while rhetoric specialists may substitute a rhetoric course for one seminar); and
6. Twenty-four (24) 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. No more than two (2) hours of LAE 5948 may be counted toward the degree.

In order to be admitted to formal candidacy for the doctorate degree, 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 12-hour written examination (eight hours on the major area, four hours on the minor area) normally given over three days; and 2) a one- to two-hour oral examination administered by the students supervisory committee, normally one to three weeks following the written examination.

Acceptable major areas for the preliminary examination are: 1) the literature of Great Britain and Ireland to 1500; 2) the literature of Great Britain and Ireland, 1500–1660; 3) the literature of Great Britain and Ireland, 1660–1800; 4) the literature of Great Britain and Ireland, 1800–1900; 5) the literature of Great Britain and Ireland after 1900; 6) United States literature to 1875; 7) United States literature after 1875; 8) a literary genre;9) Postcolonial Studies;10) Gender Studies and Queer Theory; 11) rhetoric and composition; 12) African-American literature; 13) Womens literature/gender studies; 14) literary theory and criticism; and 15) another definable field of study approved by the graduate committee.

Acceptable minor areas are all of those listed as major areas, plus: 16) folklore; 17) post-colonial literature; 18) humanities; 19) language and linguistics; 20) literature in relation to a nonliterary discipline; 21) literature and film studies; 22) cultural studies in relation to the major field; and 23) another definable field of study approved by the graduate committee. 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. Dissertation defenses will normally not be scheduled during the summer term or during final examination week.

Certificate Program in Critical Theory

An interdisciplinary graduate program in critical theory is administered by the English department. 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 (12) 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 (12) 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 (12) semester hours provided each course carries a different subtitle.

AML 5278r. 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 (12) 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 (12) 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 (12) semester hours as topics vary.

CRW 5130r. Fiction Workshop (3). Prerequisite: Permission of the instructor. May be repeated with permission of instructor up to nine times for a maximum twenty-seven (27) semester hours. Workshop emphasizes the development of the craft of fiction writing. Students are expected to work toward publication.

CRW 5331r. Poetry Workshop (3). Prerequisite: Permission of the instructor. May be repeated with permission of instructor up to nine times for a maximum of twenty-seven (27) hours. Writing and revising of poetry. Students are expected to work toward publication.

CRW 5430r. Drama Workshop (3). Prerequisite: Permission of the instructor. May be repeated with permission of instructor nine times for a maximum of twenty-seven (27) semester hours. Writing and revising of plays of varying length. Students are expected to work toward publication.

ENC 5216. Editing: Manuscripts, Documents, Reports (3). Emphasizes publication procedures and techniques of manuscript editing.

ENC 5317r. Article and Essay Workshop (3). May be repeated with permission of instructor nine times for a maximum of twenty-seven (27) hours. For students working toward publication of expository writing. Course will be 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 (0–3). (S/U grade only.) Permission of Director of Graduate Studies required. May be repeated to a maximum of three (3) 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 (12) semester hours as topics vary.

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 (12) semester hours.

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 (12) 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 (24) semester hours.

ENG 5933r. Topics in English (1–3). Topics vary. May be repeated to a maximum of twenty-four (24) 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 (24) semester hours.

ENG 5971r. Thesis (1–6). (S/U grade only.) Six (6) semester hours of credit required.

ENG 5998r. Tutorial in English (1–3). (S/U grade only.) Prerequisite: Permission of Instructor. Intensive work by 1 to 4 graduate students devoted to a specific topic or research problem in English studies. May be repeated when topics vary, to a maximum of six (6) semester hours.

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 (12) 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 (12) 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 (12) 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 (12) 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 (12) 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 (12) 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 (12) 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 (5) 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 (12) 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 (12) 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 (12) semester hours provided each course carries a different subtitle.

LIT 5185r. 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 (12) 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 (12) 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 (12) 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 (12) semester hours provided each course carries a different subtitle.

LIT 5388r. Studies in Women's Writing (3). Various approaches to the study of womens writing and women writers. May be repeated to a maximum of twelve (12) semester hours provided each course carries a different subtitle.

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 (12) semester hours as topics vary.

ENG 6907r. Directed Readings (1–6). (S/U grade only.) May be repeated to a maximum of six (6) semester hours.

ENG 6939r. Seminar in English (3). Topics vary. May be repeated to a maximum of twenty-four (24) semester hours.

ENG 6980r. Dissertation (1–12). (S/U grade only.)

ENG 8964r. Preliminary Doctoral Examination (0).

ENG 8966r. Master's Comprehensive Examination (0). (S/U grade only.)

ENG 8976r. Master's Thesis Defense (0). (S/U grade only.)

ENG 8985r. Dissertation Defense (0). (S/U grade only.

ENGLISH COMPOSITION
see English

ENGLISH EDUCATION
see Middle and Secondary Education

ENGLISH LITERATURE
see English

ENGLISH FOR NONNATIVE 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 Classical Languages, Literature, and Civilization; History

EVOLUTIONARY BIOLOGY
see Biological Science

EXERCISE PHYSIOLOGY
see Nutrition, Food and Exercise Sciences

EXPERIMENTAL ANALYSIS OF BEHAVIOR
see Psychology

EXPERIMENTAL PSYCHOLOGY
see Psychology

Department of FAMILY AND CHILD SCIENCES

College of Human Sciences

Chair: Ronald Mullis; *Professors:* Darling, Hicks, Krantz, R. Mullis, Ralston; *Associate Professors:* Cornille, Greenwood, A. Mullis, Readdick, Rehm; *Assistant Professor:* Allison; *Associate in Family and Child Sciences:* Mills; *Professors Emeriti:* Dales, Hansen-Gandy, Hendrickson, Pestle, Rapp, Ridley-Bell, Zongker

Master's degree programs are offered in the department of family and child sciences with an emphasis in child development, family relationships, and family and consumer sciences education. Students may select a program of studies with either a thesis or course option. A minimum of thirty (30) semester hours is required for each program in the thesis option including six (6) semester hours of thesis credit. Students may elect to take the course option and complete thirty-three (33) semester hours including a three (3) credit special project. In either the thesis or course option master's programs, three courses, or nine (9) semester hours, may be taken on the 4000 level with departmental permission. These programs prepare students for careers in higher education, government, cooperative extension, and private industry.

Programs leading toward the doctor of philosophy (PhD) degree in human sciences are offered in the family and child sciences department with an emphasis in child development, family relationships, or family and consumer sciences education; 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 have been designed for students who wish to teach in higher education, conduct research, or work in government or private industry. Graduates from this program work in such areas as: 1) family life education; 2) child education; 3) child welfare services; 4) child advocacy; and 5) health care.

A minimum of sixty (60) semester hours of graduate course work, exclusive of the dissertation, is required beyond the master's degree. More than sixty (60) hours are normally required, however, because programs of study are individually developed. In addition to a broad range of subject matter courses, students are provided a foundation in research methodology and statistics. Unique opportunities and departmental supports are provided in the Department of Family and Child Sciences. Internships in human service agencies, education, business, private industry, and the State Extension Service are available and encouraged for students. Departmental supports including the Norejane Hendrickson and May Watson Connor Awards 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. In some instances, supplemental course work (undergraduate and graduate) may be required for students entering the program from other fields of study. Options available to the student can be discussed prior to admission to the program. Students entering the Interdivisional Program in Marriage and Family also will need an affirmative recomendation by the faculty review committee.

Master's Programs in the Department of Family and Child Sciences

Major in Child Development or Family Relations

Required Courses

CHD	5266	Advanced Child Development (3)
CHD	6261	Theories of Child Development (3)
EDF	5400	Basic Descriptive and Inferential Statistics Applications (4)
FAD	5261	Families in Crisis (3)
FAD	5934r	Seminar in Family and Child Sciences: Contemporary Families (3)
FAD	5934r	Seminar in Family and Child Sciences: Topics Vary (3–9)
HEE	5915	Methods of Research (3)

A minimum of five to six (5–6) 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 (30) semester hours is required for a degree with a thesis.

The balance of the course work 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 thirty-three (33) semester hours.

The PhD program is an individual program planned by students, their major professor, and supervisory committee. Below is a listing of the required course work with the balance of the planned program based on the student's background and professional goals. At least sixty (60) semester hours of graduate work in addition to the dissertation is required beyond the master's degree.

PhD Degree in Human Sciences with a Major in Child Development or Family Relationships

Required Courses for all Majors

CHD	6261	Theories of Child Development (3)
EDF	5401	General Linear Models (4)
		or
STA	5207	Applied Regression Methods (3)
FAD	5912	Supervised Research (1–3)
		or
CHD	5912r	Supervised Research (1–3)
FAD	5934r	Seminar in Family and Child Sciences: Topics Vary (3–9)
FAD	6260	Family Process (3)
FAD	6917	Methods of Research (3)
HOE	6916	Research Communication (3)
HOE	6938r	Proseminar in Home Economics (1–2)

Requirements Only for Child Development Majors

CHD	6930r	Seminar in Child Development (3–9)
CHD	6261	Theories of Child Development (3)

Requirements Only for Family Relationships Majors

FAD	5261	Families in Crisis (3)
FAD	6450	Human Sexuality (3)

All students must pass a preliminary examination prior to admission to candidacy and before they can register for dissertation hours. A minimum of thirty (30) semester hours of graduate courses must be selected from within the department, and students must take at least eighteen (18) semester hours in research courses.

Family and Consumer Sciences Education

Programs of study in family and consumer sciences education are individually planned to prepare graduates for leadership roles in secondary schools, higher education, government agencies, and business. A portion of the courses taken in pursuit of the master's degree can be used to meet requirements for teacher certification in vocational home economics.

Research is an important component of graduate study in family and consumer sciences education. At the master's level students are required to satisfactorily complete a research problem or thesis, and completion of a dissertation is a degree requirement for the PhD. Department faculty members are actively involved in acquiring and

carrying out funded research projects. This outside funding makes it possible for the department to provide research assistantships to qualified students.

The college maintains a resource center for use by faculty and students. It houses a variety of curriculum materials as well as textbooks and audiovisuals. In addition, books and documents useful in carrying out historical research are available.

Requirements

Eligibility for graduate study in family and consumer sciences education is based on an adequate background in education or a related area. The department's graduate faculty must be satisfied that students' backgrounds are sufficient to enable them to successfully complete the program.

Minimum admission requirements include a baccalaureate degree from an accredited institution with an academic average of 3.0 or higher (4.0 scale) on all work attempted as an upper-division undergraduate student, or a 3.0 on a master's degree from an accredited/approved institution, or a minimum score of 1000 on the combined verbal and quantitative portions of the Graduate Record Examinations (GRE). In lieu of a GRE score, vocational home economics teachers can present a minimum score of 2250 on the College Level Examination Program (CLEP) with no less than 400 in each of the five areas. International students must also have a minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Master's Degree Program

A program of studies for each student is individually planned under the direction of a major professor and a supervisory committee. The thesis-type degree requires thirty (30) semester hours and the course-work type requires thirty-two (32) semester hours.

The following courses are required of all students pursuing a master's degree in family and child sciences education: HEE 5340, 5450, 5651, 5560, 5915, 5935r or 5971r, 8966. Students must also enroll in at least one of the following: HEE 5160, 5900, 6180, 6936r, or EDF 5400. Students who enroll in HEE 5971r must also enroll in HEE 8976.

Doctoral Degree Program

A program of studies for each student is individually planned under the direction of a major professor and program of studies committee. Programs are based on the expressed career goals of the student and the results of the written and oral diagnostic examination. Students are required to complete a minimum of fifteen (15) semester hours in family and consumer sciences education and twelve (12) semester hours in a subject matter area in addition to the following required courses: HOE 6916, 6917, 6938r; EDF 5400, 5401, 5410.

The student must be continuously enrolled for a minimum of twenty-four (24) graduate semester hours credit in any period of 12 consecutive months while pursuing the doctoral degree.

Interdivisional Program

The department participates in the Interdivisional Program in Marriage and Family, offering major sequences in teaching, research, and marriage and family therapy. These lead toward the doctor of philosophy degree. Students entering the interdivisional program through the Department of Family and Child Sciences will specialize in marriage and family therapy and 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 Development
HEE — Home Economics Education
HOE — Home Economics: General

Advanced Undergraduate Course

HEE 4171. Teaching Independent Living Skills (3). Selected subject matter and teaching methods applicable to improving independent living for handicapped and/or disadvantaged persons throughout the life span. Clinical experience.

Graduate Courses

Child Development

CHD 5266. Advanced Child Development (3). Survey of the contemporary child development research literature.

CHD 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

CHD 5940r. Practicum in Child Development: Varied Ages (infancy, preschool, school-age) (3–9). Prerequisites: Background knowledge in child development or early childhood education at the graduate level or undergraduate practicum and permission of instructor. May be repeated but only once in each age level to a maximum of nine (9) semester hours.

CHD 6261. Theories of Child Development (3). Prerequisites: Graduate courses in child development, psychology, counseling or family. Permission of instructor. Review of current theories of child development.

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. Permission of instructor. Each age or topic may be taken only once. May be repeated to a maximum of nine (9) semester hours.

Family Relationships

FAD 5261. Families in Crisis (3). Prerequisite: Background in family. Theoretical consideration of persistence and change in families with special attentions to critical transitions in family development.

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 (3) semester hours.

FAD 5666. Theories in Marital and Family Therapy (3). Prerequisites: Permission of instructor and background in family at the graduate level. Doctoral students only.

FAD 5900r. Readings in Family and Child Sciences (3). Prerequisites: Permission of instructor, background in family and child. Topics vary and each topic may be taken only once. May be repeated to a maximum of nine (9) semester hours.

FAD 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

FAD 5934r. Seminar in Family and Child Sciences (3–9). Prerequisites: Background in family at the graduate level and permission of instructor. Topics vary and each topic may be taken only once. May be repeated to a maximum of nine (9) semester hours.

FAD 5944r. InternshipFamily/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 (12) 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 6260. Family Development and Interaction (3). Prerequisite: Permission of the instructor. The course integrates development and systems theory to provide an understanding of family dynamics and development. Relationships at the micro level are the primary forces.

FAD 6450. Human Sexuality (3). Prerequisite: Advanced graduate standing or permission of instructor. Biological, psychological, sociological, and familial aspects of human sexuality during the lifespan. 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 6660. Professional Studies in Marital and Family Therapy (3). Prerequisite: Marriage and family therapy track majors only. Examines the ethical standards of family therapy and issues, such as public laws and policies, which impact on the practice of marital and family therapy.

FAD 6661. Divorce and Postdivorce Counseling (3). Prerequisites: FAD 5666, background in marriage and family therapy, and permission of instructor. Doctoral students only. Family disorganization and reorganization are examined in the context of a multidisciplinary developmental perspective. Assessment and treatment issues are addressed in relationship to polarized couples.

FAD 6662. Systems Evaluation: Assessment Intervention and Case Planning (3). This course is specifically designed to assist students in systems assessment at the supra, system, and subsystem levels. It focuses on key substantive material and research in the area of theory and practice. The course provides a seminar format for the application of theory to practice.

FAD 6667. Sex Therapy (3). Prerequisites: FAD 5666, 6660, 6450. Marriage and family therapy track majors only.

FAD 6917. Methods of Research II (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). Prerequisites FAD 5666, marriage and family therapy majors, and permission of instructor. Doctoral students only. Each topic may be taken only once. May be repeated to a maximum of nine (9) semester hours.

FAD 6935r. Special Topics: Family and Child Development; Topics Vary (3–9). May be repeated to a maximum of nine (9) semester hours but each topic may only be taken once.

FAD 6940r. Practicum in Marital and Family Therapy (1–5). (S/U grade only.) Prerequisites: FAD 5666, 6660, 6662; advanced doctoral students in marriage and family therapy track; and permission of instructor. May be repeated to a maximum of twenty-one (21) semester hours.

Family and Consumer Sciences Education

HEE 5160. Methods and Media in Home Economics Education (3). Selection and preparation of appropriate methods and media for achieving objectives in home economics programs.

HEE 5340. Home Economics Program Development (3). Factors affecting the design and implementation of home economics programs for the classroom, extension, government, and community agencies.

HEE 5347r. International Home Economics (1–3). Exploration of world-wide developments and education in home economics by subject matter areas, geographic areas, professional work contexts, agencies, cross-cultural applications, and adaptations of basic principles. May be repeated to a maximum of six (6) semester hours.

HEE 5450. Educational Measurements and Evaluation (3). Scope and function of measurement and evaluation of student growth in programs.

HEE 5560. Supervision of Home Economics (3). Theoretical concepts in supervision and administration of home economics programs.

HEE 5651. History and Philosophy of Home Economics (3). Historical and philosophical issues in the development that serve as a basis for present day events and philosophies.

HEE 5900r. Readings in Home Economics Education (3–12). May be repeated to a maximum of twelve (12) semester hours.

HEE 5905r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

HEE 5911r. Supervised Research (1–4). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of four (4) semester hours.

HEE 5915. Methods of Research (3). Study of research design, with emphasis on the development of the prospectus for a thesis or dissertation.

HEE 5935r. Special Topics in Home Economics Education (1–6). (S/U grade only.) Special topics in home economics education. May be repeated to a maximum of six (6) semester hours.

HEE 5942r. Supervised Teaching (1–4). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of four (4) semester hours.

HEE 5971r. Thesis (1–6). (S/U grade only.) Minimum of six (6) semester hours required.

HEE 6180. College Teaching of Home Economics (3). Curriculum, media, methods, and evaluative processes for home economics programs in higher education.

HOE 6916. Research Communications (3). Prerequisite: HEE 5915, HUN 5802, CTE 5911, or by permission of the instructor. The development of skills to utilize research in communicating effectively to a variety of audiences.

HEE 6936r. Home Economics Research Seminar (1–3). Current issues in home economics and application of research techniques. May be repeated to a maximum of three (3) semester hours.

HEE 6980r. Dissertation (1–24). (S/U grade only.)

HEE 8964r. Preliminary Doctoral Examination (0).

HEE 8966r. Master's Comprehensive Examination (0).

HEE 8976r. Master's Thesis Defense (0).

HEE 8985r. Dissertation Defense (0).

Other Courses

CHD 5912r. Supervised Research (1–3). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of three (3) semester hours.

CHD 5942r. Supervised Teaching (1–3). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of three (3) semester hours.

CHD 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

CHD 6980r. Dissertation (1–24). (S/U grade only.)

CHD 8964r. Preliminary Doctoral Examination (0).

CHD 8966r. Master's Comprehensive Examination (0).

CHD 8976r. Master's Thesis Defense (0).

CHD 8985r. Dissertation Defense Examination (0).

FAD 5912r. Supervised Research (1–3). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of three (3) semester hours.

FAD 5942r. Supervised Teaching (1–3). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of three (3) semester hours.

FAD 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

FAD 6980r. Dissertation (1–24). (S/U grade only.)

FAD 8964r. Preliminary Doctoral Examination (0).

FAD 8966r. Master's Comprehensive Examination (0).

FAD 8976r. Master's Thesis Defense (0).

FAD 8985r. Dissertation Defense Examination (0).

FAMILY DEVELOPMENT
see Family and Child Sciences

FILM
see Communication; English; Latin American and Caribbean Studies; Modern Languages and Linguistics; School of Motion Picture, Television, and Recording Arts

FINANCE
see also Multinational Business Operations

Department of FINANCE

College of Business

Chair: Donald A. Nast*; Professors*: Ang, Brown, Celec, Clark, Coats, Humphrey, Nosari, Osteryoung, D. Peterson, P. Peterson, Turner*; Associate Professors*: Benesh, Christiansen, Nast, Scott*; Assistant Professors:* Cheng, Nelson; *Service Professor:* Brown; *Visiting Assistant Professor:* Inci; *Fannie Wilson Smith Eminent Scholar in Banking*: Humphrey; *Bank of America Eminent Scholar in Finance:* Ang; *SunTrust/Tallahassee Professor of Finance:* Nast; *First Union Professor of Finance*: D. Peterson; *Jim Moran Professor of Entrepreneurship*: Osteryoung; *Charles A. Bruning Professor of Business Administration*: Nosari

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, coresearch 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 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 finanial 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 nonbusiness 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 5314. Administration of Financial Institutions (3). Prerequisite: MAN 5716. Analysis of institutions constituting the money markets within the framework of their respective operation and administration.

FIN 5445. Problems in Financial Management (3). An advanced case course including in-depth study of selected topics such as valuation theory and the investment, financing, and dividend decisions of the firm.

FIN 5515. Investment Management and Analysis (3). Analysis of financial assets with emphasis on the securities market, the valuation of individual securities, and portfolio management.

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 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 (9) 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 (9) 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 (3) hours may apply towards the master's degree. May be repeated to a maximum of five (5) 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 (3) 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 (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

FIN 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

FIN 8966r. Master's Comprehensive Examination (0).

FIN 8976. Master's Thesis Defense (0).

GEB 5446. The Business Context (3). Corequisite: ACG 5005 or equivalent. MBA Foundation Course. This course will consist of half a term of marketing management and half a term of financial management. The marketing management segment provides a comprehensive overview of marketing systems and major marketing management decision areas, with an emphasis on factors influencing managerial decisions. The financial management segment provides an introduction to the terminology, methodology and basic decision models of finance, with an emphasis on working capital management, capital budgeting, capital structure, and the dividend decision.

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. In exceptional cases, master's candidates may elect 6000 level courses with permission of the instructor and the associate dean for academic programs.

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 (1–3). The study of the development of investment theory including utility analysis, risk measurement, structure and efficiency of the security markets, and other current topics 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 6808. Foundations of Financial Theory (3). Emphasis on the foundations of financial theories with a thorough examination of the major theoretical developments of finance including the study of related empirical tests.

FIN 6842. Research Methods in Finance (3). Prerequisite: FIN 6808. Critical examination of empirical research in finance and its related issues including design, methodology, analysis, and critique. Utilization of financial databases with appropriate quantitative techniques in the design and conducting of an empirical research project.

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 (5) 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 (5) semester hours.

FIN 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours is required.

FIN 8964r. Doctoral Preliminary Examination (0).

FIN 8985r. Dissertation Defense Examination (0).

GEB 6904r. Readings For Examination (1–12). (S/U grade only.) Prerequisite: All course work required for PhD. This course is designed for PhD students who have completed all of their required course work and are preparing to sit for their preliminary examinations in the current semester. May be repeated to a maximum of twenty-four (24) 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

Chair: Barney Warf; *Professors:* Elsner, Kodras, O'Sullivan, Warf; *Associate Professors:* Baker, Leib; *Assistant Professors:* Klooster, Savitsky, Stallins, Steinberg; *Affiliate and Adjunct Faculty:* Anderson, Miller, Molina

The Department of Geography at The 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, a proverbial balance between geographic information systems and "the geographical imagination." Faculty and students working in the geography department investigate critical issues of human 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 to specific social and environmental problems such as tropical deforestation, global hunger and human health concerns, natural and technological hazards, geopolitics and warfare, economic restructuring, and urban poverty.

The focus of departmental offerings is the political and policy analysis of environmental and socioeconomic issues in geographic contexts, including political economy and political ecology, international geopolitics, local political conflict, environmental equity, the politics of representation, urban change, and resource management. Faculty address both the theoretical and applied policy arenas in their research, teaching, and service functions.

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 presented results of their research at professional conferences or in academic journals. The College of Social Sciences hosts a GIS laboratory with microcomputers running GIS, remote sensing and statistical software.

Requirements

Applicants must hold a degree in geography or a related field from an accredited college or universit, 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 must complete the Test of English as a Foreign Language (TOEFL) with a minimum score of 550.

Applicants should notify the Graduate Admissions Coordinator of their interest in entering the graduate program. Students should send a letter describing whether they are applying for the master's or doctoral program, their qualifications and long term goals, as well as their specific interests and how they coordinate with the department's areas of expertise. If you wish to be considered for financial assistance, enclose the appropriate application. In addition, students should arrange for three letters of recommendation to be forwarded directly to the department.

Master's Program

All students admitted to the graduate program in geography are required to attend an annual orientation session the week prior to Fall term. Each student must select a potential major professor in accordance with the student's interests. Students should consult with the Graduate Advisor. The student and major professor then meet to design an appropriate program of courses. The department convenes at regular intervals throughout the academic year as faculty, graduate students, and visiting scholars present their research in a colloquium series.

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-three (33) semester hours. Students are required to take three core courses (nine [9] 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 [24] semester hours total) in consultation with the major professor. Students may take electives from departments throughout the University that bolster the department's offerings.

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 course work, 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's of science (MS) and master's of arts (MA) degrees.

The coursework consists of a minimum of twenty-four (24) semester hours (plus a minimum of six thesis hours). Students are required to take three core courses (nine [9] 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 bachelors 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 [15] semester hours) in consultation with the graduate advisor or major professor. Students may take electives from departments thoughout the University that bolster the department's offerings.

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.

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 [21] 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 disserta-

tion 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 gives an oral defense of the prospectus, open to the departmental faculty and graduate students. The supervisory committee passes the defense with a majority vote. The student then begins the research and writing process. At some point during one's doctoral study, a student must register for a total of twenty-four (24) semester hours taken in a period of twelve (12) consecutive months. The final step involves an oral defense of the dissertation.

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 $8,000 and $11,500. Support in following years is usually available 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 (13) and twenty (20) 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. Students on departmental funding who accrue a large number of incompletes put their future funding in danger.

For more information, contact the Graduate Admissions Coordinator at *http://www.fsu.edu/~geog.*

Definition of Prefixes

GEA — Regional Geography
GEO — Systematic Geography

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 5056. Social Theory and Spatial Structures (3). Course examines interrelations of contemporary social theory and political economy with geographic relations.

GEO 5058. Survey of Geographic Thought (3). History of geography as a discipline, ranging from classical origins to contemporary philosophical schools and debates.

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 5157. 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.

GEO 5159. Geographic Information Processing and Systems (3). Prerequisite: GEO 3140 or consent of instructor. 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.

GEO 5165C. Quantitative Geography (3). Prerequisite: GEO 4185C. Introduces the use of 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 5262C. Soils and Land Forms (3). Land forms, soils development, and hydraulic processes, and their spatial variations with particular emphasis on the coterminous United States.

GEO 5287. Water Resource Analysis (3). Focuses on water as natural and social resource, models of hydraulic flow, groundwater, water pollution, public planning measures; particular reference is made to water utilization in Florida.

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 5353. Human Dimensions of Global Environmental Change (3). Course surveys the multiple ways in which humans have initiated or accelerated changes in the earth's biophysical environment, including population growth, resource depletion, pollution and species destruction. It relates these topics to contemporary geographical theory.

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 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 5465. Historical Geography (3). The concepts, approaches and research methods appropriate to the analysis of past patterns of land use and life or of the changing occupation of the face of the earth through time.

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 5481. Military Geography (3). A survey of the geography of warfare, including: tactics and terrain, strategy and the theater of war, insurgency, war in cities, geopolitics and grand strategy.

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 moderization theory, and current topics in ethnic conflict and the global economy.

GEO 5605. Urban Geography (3). Close reading of recent literature in urban geography, stressing the urban division of labor and restructuring, urban social theory, suburbanization, the crisis of the inner city ghetto, urban politics and policies, and world cities.

GEO 5908r. Directed Individual Study (1–5). May be repeated to a maximum of nine (9) semester hours.

GEO 5918r. Supervised Research (1–3). (S/U grade only.) A maximum of three (3) 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 (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 (3) hours may apply to the master's degree. May be repeated to a maximum of three (3) semester hours.

GEO 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

GEO 6980r. Dissertation (1–9).

GEO 8964r. Preliminary Doctoral Examination (0). (S/U grade only.)

GEO 8966r. Master's Comprehensive Examination (0).

GEO 8976r. Master's Thesis Defense (0).

GEO 8985r. Dissertation Defense (0). (S/U grade only.)

GEOGRAPHY: REGIONAL see Geography; Latin American and Caribbean Studies

Department of GEOLOGICAL SCIENCES

College of Arts and Sciences

Chair: Neil Lundberg; *Professors:* Cowart, Furbish, Loper, Lundberg, Odom, Tull, Wise, Zindler; *Associate Professors:* Arnold, Donoghue, Kish, Parker, Salters, Wang; *Assistant Professors:* Schmeekle, Streepey; *Visiting Assistant Professor:* Fagherazzi; *Curator:* Janecek; *Courtesy Professor:* Schmidt; *Professors Emeriti:* DeVore, Osmond, Tanner, Winters

The Department of Geological Sciences offers postbaccalaureate studies leading to both the master of science (MS) and the doctor of philosophy (PhD) degrees in geology and geophysics 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 primary home, was completed in 1953 and renovated in 1998. The PhD program was initiated in the early 1960s, and the permanent faculty has since grown to its present size. Faculty interests encompass many specialties, including micropaleontology, marine geology, both chemical and physical hydrogeology, sedimentology and coastal processes, geomorphology, geochemistry, structure and tectonics, seismology, geochronology, economic geology, petrology, 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 of Geological Sciences, or they may involve collaborative work with members of the departments of Oceanography and Physics, the College of Engineering, the Center for Earth Surface Processes Research, the Geophysical Fluid Dynamics Institute, the School of Computational Science and Information Technology, and the National High Magnetic Field Laboratory. The Department of Geological Sciences 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.

Instrumentation available for research includes an ICP-MS, computer-controlled thermal ionization and secondary ionization mass spectrometers, alpha and gamma spectrometers, automated X-ray diffraction equipment, electron spin resonance spectrometer, atomic absorption and UV-VIS spectrometers, scanning electron microscope with microprobe attachment, 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 country, 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, which varies considerably in size of stipends and number of awards from year to year, 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 1050 (verbal and quantitative) on the aptitude test of the Graduate Record Examinations (GRE) and a score of at least 400 on each portion. In addition, the applicant should have 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).

A beginning graduate student should normally have preparation equivalent to that required for a baccalaureate degree in geology at this University, including a minimum of a year each of chemistry and physics, mathematics through calculus, physical and historical geology, paleontology, mineralogy, elementary petrology, structural geology, stratigraphy, and field geology.

Master's Degree Requirements

The Department of Geological Sciences offers only the thesis-type program for the master's degree. 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.

Course work 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 course is required in each of the following areas: 1) mineralogy/petrology/geochemistry, 2) structure/tectonics/geo-physics, 3) paleontology/stratigraphy, and 4) hydrology/geomorphology/sedimentation. One semester per year of seminar (GLY 5931r) also is required.

No later than the second semester of the student's graduate program, a thesis adviser and supervisory committee should be selected and a program of study approved. 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 Degree

The PhD degree is based on satisfactory completion of required course work, 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 *Department of 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.

Definition of Prefix

GLY — Geological Sciences

Graduate Courses

GLY 5020r. 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 (6) semester hours.

GLY 5021r. 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 (6) 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 5230C. X-Ray Crystallography (3). Prerequisite: GLY 3200C or equivalent. Application of X-ray diffraction and X-ray fluorescence techniques to the study of minerals.

GLY 5261. Geochronology (2). Prerequisite: GLY 4240 or equivalent. Theory, techniques, and application of dating geologic materials by methods utilizing natural radioactivity, the accumulation of radiogenic isotopes, and the radiation damage or molecular structure of materials.

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 5295r. Advanced Topics in Nuclear Geology (1–3). Special topics, on demand, in isotope geochemistry and nuclear geology. May be repeated to a maximum of six (6) semester hours.

GLY 5298r. Advanced Topics in Geochemistry (1–3). Special topics, on demand, in low temperature geochemistry. May be repeated to a maximum of six (6) semester hours.

GLY 5321C. Igneous Petrology (4). Prerequisite: GLY 3310C or equivalent. Origin, emplacement, and modification of igneous rocks. Phase equilibria in silicate systems. Tectonic setting of igneous rocks. Laboratory consists of descriptions and classification of igneous rocks utilizing the petrographic microscope.

GLY 5346. Sedimentary Petrology (3). Prerequisite: GLY 3340C. The composition, lithification, and diagenesis of sedimentary rocks, emphasizing the interpretation of provenance, sedimentary processes, and post-depositional modifications. Laboratory exercises.

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 (6) 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 5435. Advanced Structural Geology (1–3). Prerequisite: GLY 3400C. Study of basics of continuum mechanics as related to the principles of deformation; stress and strain analysis; and rheological relationships in geological materials. Analysis of deformational mechanisms, fracture and brittle behavior, and rock fabrics.

GLY 5455. Introduction to Geophysics (3). Prerequisites: MAP 2302; PHY 2049; or consent of instructor. 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, 3305; 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 (6) 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 (6) 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; 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 5576. Stratigraphy and Sediments of Transitional Marine Environments (3). Prerequisite: GLY 4551, 4511, or equivalent. Stratigraphy and development of transitional sedimentary environments: comparison of modern and ancient examples of deltas, estuaries, lagoons, barrier islands, and shelf deposits; models for sedimentation; seismic stratigraphy of marginal marine environments; sedimentologic effects of sea-level change; facies analysis.

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 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 (6) 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 (8) 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 (8) semester hours.

GLY 5735. Nearshore Marine Geology (2). Prerequisites: Graduate standing, MAC 2313. The "a-b-c . . ." model of sediment transport and beach erosion; Langmuir cells; wave vs. sediment interactions (energetics).

GLY 5736. Marine Geology (3). Shoreline, shelf, and deep ocean processes; marine sediment types and sedimentary environments; plate tectonics; origin of the ocean; paleooceanography; 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 5756. Advanced Field Methods (1). Provides students with practical experience in the techniques, procedures, and tools necessary to geological field research. An introduction to the use of aerial photography in geologic research. Required for summer field course.

GLY 5757C. Fundamentals of Remote Sensing, Air Photo Interpretation and GIS for the Earth Sciences (4). Prerequisites: GLY 3400C; 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; 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, basic physics (for science majors). Fundamentals of hydrogeology with emphasis on groundwater flow and hydrochemistry. Both theory and applications are addressed.

GLY 5828. Chemical Hydrology (3). Prerequisite: GLY 5827 or consent of instructor. Geochemical principles relating to terrestrial waters and water-rock interactions.

GLY 5845. Subsurface Geology (3). Prerequisites: GLY 3400C, calculus. Bore-hole geophysics; information theory mapping; origin and migration of oil (and gas); oil traps; analysis of petroleum statistics; basin analysis and paleogeography.

GLY 5868r. 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 (6) semester hours.

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 (6) semester hours.

GLY 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated for a maximum of nine (9) semester hours.

GLY 5910r. Supervised Research (1–5). (S/U grade only.) No more than three (3) semester hours may apply to a master's degree. May be repeated to a maximum of five (5) semester hours.

GLY 5931r. Graduate Seminar (1). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

GLY 5940r. Supervised Teaching (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. No more than three (3) hours may apply to a master's degree.

GLY 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours of credit is required.

GLY 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours of credit is required.

GLY 6982r. Doctoral Seminar (1). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

GLY 8964r. Preliminary Doctoral Examination (0).

GLY 8966r. Master's Comprehensive Examination (0).

GLY 8975r. Master's Thesis Defense (0).

GLY 8985r. Dissertation Defense (0).

Program in GEOPHYSICAL FLUID DYNAMICS

College of Arts and Sciences

Program Director: Albert I. Barcilon; *Coordinating Committee:* Blumsack (Mathematics), R. Krishnamurti (Oceanography), O'Brien (Meteorology), Furbish (Geological Sciences); *Professors:* Barcilon, T. N. Krishnamurti, O'Brien, Pfeffer, Zou, (Meteorology), Buzyna, Chen (Engineering), Clarke, Dewar, R. Krishnamurti, Nof, Stern, Weatherly (Oceanography), Hussaini, Loper, Navon (Mathematics), Furbish (Geological Sciences); *Associate Professors*: Arce (Engineering), Blumsack, Magnan (Mathematics), Clayson (Meteorology), Speer (Oceanography); *Assistant Professor:* Schmeeckle (Geological Sciences); *Visiting Assistant Professor:* Cunningham (Meteorology); *Research Associates*: Cain, Cekirge, Challa, Kung

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, such as the general circulation of the atmosphere, oceanic circulations, mantle convection, and the motions which drive the geodynamo. The approach to this understanding is through mathematical, numerical, and experimental modeling. A geophysical fluid dynamist must have a firm grasp of the fundamental principles of classical physics, a knowledge of the techniques of applied mathematics, and a background in the earth sciences. The dynamist thus combines the talents of a classical physicist, an applied mathematician, and either a meteorologist, an oceanographer, or a geophysicist. It follows that the course of study leading to a degree in geophysical fluid dynamics is a demanding one suitable only for the superior student, but at the same time it 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 jointly by the departments of Geological Sciences, Mathematics, Meteorology, and Oceanography, but has its own separate degree requirements. It differs from the regular departmental offerings in the earth sciences mainly by its 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 Geological Sciences, Mathematics, Meteorology, Oceanography, Physics, and Statistics. 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 and experimental 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 water flume, 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 main computing facilities within the institute consist of four Sun workstations and four Compaq Alpha workstations tied directly to the University-wide computer network. In addition, many mini- and microcomputer systems are available for laboratory experiments and general usage.

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.

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 course work or study at The Florida State University. Upon arrival, the student may expect to take a diagnostic examination designed to test for deficiencies to help formulate the student's program of study.

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 course work in partial differential equations (MAP 5345, 5346) and fluid dynamics (MAP 5431, OCP 5253) with a grade of "B" or better, participation in a seminar at least three times, and mastery of modern computer techniques, particularly numerical analysis. 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.

Geological Sciences

Geophysics, geophysical methods, seismology, modeling of groundwater flow.

Mathematics

Numerical analysis, vector and tensor analysis, ordinary differential equations, matrix algebra, integral transforms and asymptotics, perturbation theory, hydrodynamic stability, wave propagation theory.

Meteorology

Atmospheric thermodynamics, atmospheric dynamics, advanced atmospheric dynamics, dynamical meteorology, large-scale atmospheric circulations, dynamical weather prediction;

Oceanography

Ocean waves, stability of geophysical fluid flows, dynamics of isolated eddies, ocean circulation, coastal ocean dynamics, main ocean thermocline, turbulence, dynamic oceanography.

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.

Geological Sciences

GLY 4451, 5425, 5556, 5573, 5575, 5825, 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 4301, 4302, 4400C, 4420, 4450, 5311, 5312, 5340r, 5471, 5541r.

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 (9) semester hours.

GFD 6915r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) 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 (2) 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). (S/U grade only.)

GFD 8985r. Dissertation Defense (0).

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 Classical Languages, Literature, and Civilization

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

Interdisciplinary Program In HEALTH POLICY RESEARCH

Director: Marie E. Cowart. *Faculty*: Charles Barrilleaux, Gary Fournier, Mary Ellen Guy, Allen Imershein, John Taylor

The College of Social Sciences offers an interdisciplinary master's degree to prepare health policy researchers. The program prepares graduates needed in modern private and public sector health care who can organize, evaluate and manage information, and possess analytic skills in evaluation and research using electronic information systems for the analysis of health care issues in Florida and nationally.

Requirements

The program admits students with a minimum of a baccalaureate degree from an accredited institution. The undergraduate degree may be social science or health related, but this is not a requirement. The degree requirement of thirty-six (36) semester hours includes coursework in health systems and policy, quantitative methods, an internship, and a capstone research paper. As an interdisciplinary degree, the credit requirements for the major are met by completing the core curriculum balanced with twelve (12) elective semester hours to allow study in areas of individual interest.

Admission criteria include a 3.0 cumulative undergraduate grade point average (GPA) and a minimum of 1500 on three sections of the Graduate Record Examination (quantitative, qualitative, and analytic scores). For students whose native language is not English, a TOEFL of 550 (2l3 on the computer-based version) is necessary.

The course of study builds on a required set of core courses that include research methods used by health care analysts and health care topics, and allows for choice in a concentrated area of study. The program requires an internship experience on completion of the core courses, and culminates with a research project that will engage the student in practical work combining statistics, computer applications, economics, and other social sciences and research methods.

The total academic credits required for graduation are thirty-six (36) semester hours earned at a minimum of a 3.0 GPA, with a maximum of six (6) semester hours taken S/U. The curricular requirements are as follows:

1. Health Subject Matter—nine (9) semester hours;
2. Research Methods—nine (9) semester hours;
3. Internship—three (3) semester hours;
4. Research Paper—three (3) semester hours; and
5. Electives from a concentration—twelve (12) semester hours.

Elective courses may be selected from the following:

a. Financing and Economics
b. Research Methods and Analysis
c. Information Resources Management
d. Policy Analysis
e. Aging Policy
f. Epidemiology

Basic Courses

Research Methods

This requirement for nine (9) semester hours of research methods may be met by taking the three course research and statistics sequence offered in any one of these departments: economics, political science, public administration, sociology, or urban and regional planning.

Recommended courses include:

Economics

ECO	4431	Introduction to Economic Forecasting (3)
ECO	5117	Applied Microeconomics II (3)
ECO	5420	Basic Applied Econometrics (3)

Political Science

POS	5736	Research Design (3)
POS	5737	Political Science Data Analysis (3)
POS	5746	Quantitative Analysis in Political Science (3)

Public Administration

PAD	5700	Research Design in Public Administration (3)
PAD	5701	Quantitative Analysis in Public Administration (3)

Sociology

SYA	5345	Introduction to Research Methods (3)
SYA	5406	Multivariate Analysis (3)
SYA	5455	Social Statistics and Data Analysis (3)

Urban and Regional Planning

URP	5201	Methods of Planning Analysis I: Research and Evaluation (3)
URP	5211	Methods of Planning Analysis II: Statistics (3)
URP	5222	Policy Analysis for Planning Decisions (3)

Health Subject Matter

These required courses are:

ECP	5536	Seminar in Health Economics (3)
SYD	5137	Fundamentals of Epidemiology (3)
URP	5520	The U.S. Health Care System (3)

Internship

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, taken after successful completion of the first semester of required core courses, is accompanied by a three (3) semester hour internship seminar that focuses on workplace and research application issues. The internship experience is evaluated by the preceptor in the health setting, the student, and the faculty advisor. In special instances, the internship requirement may be waived.

Research Paper

The purpose of the research paper is to provide an opportunity for the student to synthesize knowledge gained in the basic curriculum and orally defend their work before two faculty members. This independent work will produce a research project on a timely health topic. The credit is taken under the directed individual research course in the department of the major professor guiding the research. For students wishing to complete a thesis in lieu of the research paper, the student would complete six (6) semester hours of master's thesis for a total of thirty-nine (39) semester hours for the degree.

Electives

Students may select elective courses from an approved listing of available courses. Elective course offerings are grouped by subject allowing students to follow a concentration within the degree. Course concentrations include: financing and economics, research methods and analysis, policy analysis, and aging policy.

Financing and Economics:

ECO	5117	Applied Microeconomics II (3)
PAD	5935	Seminar in Public Administration: Selected Topics (1–3)

Research Methods and Analysis:

ECO	5423	Econometric Theory (3)
ECO	5424	Simultaneous Equation Models (3)
ECO	5425	Time Series Analysis (3)
ECP	5116	Applied EconomicDemography (3)
GEO	5934	Seminar in Current Topics (3)
PAD	5327	Public Program Evaluation (3)
PAD	6705	Analytic Techniques for Public Administrators (3)
POS	5747	Advanced Quantitative Analysis in Political Science (3)
SYA	5407	Advanced Quantitative Methods (3)
SYD	5135	Techniques of Population Analysis (3)

Policy Analysis:

PAD	5035	Policy Development and Administration (3)
PAD	5846	Health Policy and Public Administration (3)
SYO	5405	Health Institutions and Social Policy (3)

Aging Policy:

PUP	5335	Aging Politics and Policy (3)
SYP	5735	Sociology of Aging (3)
SYP	5737	The Dynamics of Aging and Social Change (3)
URP	5530	Policy and Planning for the Aging (3)

For the individual full-time student in the Health Policy Research program, the program may be reasonably completed in three semesters.

HEALTH–RELATED PROGRAMS

Numerous health-related programs at The 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.*

Pepper Institute on Aging and Public Policy

The Pepper Institute on Aging and Public Policy has a multidisciplinary focus and plays a coordinating and facilitative role for the work of all academic units with interests in gerontological issues. The resources of the institute are used to support individual or collaborative research and graduate training initiatives by providing technical assistance or a location for conducting research. As an aid to the community, the institute provides access to information and professional staff. The institute facilitates and disseminates research information, provides guidance to students interested in aging and administers the Master's in Aging Studies and Certificate in Aging Studies. The Master's in Aging Studies prepares graduates to assume professional leadership positions in research, administration, planning, implementation and evaluation of programs designed to improve the lives of older adults and their families. The certificate provides an educational credential that documents the additional training and experience the student has received in the field of aging. The Pepper Institute on Aging is located in the Pepper Center, which houses faculty offices, state of the art research facilities, computer labs and survey support resources. The Pepper Center also contains the Pepper Library and Museum and the Broad Auditorium enabling the institute faculty to present research and promote outreach activities to students, state officials, and citizens throughout the state. For information contact *slampman@mailer.fsu.edu* or *(850)644-3520.*

Department of Communication Disorders

The Department of Communication Disorders has majors in speech-language pathology, and speech and communication science and offers the graduate degrees of master of arts (MA), master of science (MS), advanced master of science (AMS), and doctor of philosophy (PhD). The scope of the department 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 communicative skills, and obtain experience in evaluation, treatment, and research. For information contact: *commdis.info@comm.fsu.edu* or *(850)644-2253.*

Health Education Program

The health education program of the Department of Middle and Secondary Education offers emphasis in school health, community health, and school/community health leading to a master's degree. The school health education program is designed to provide students with a broad background in school health education program development, implementation, and evaluation. The community health education program is designed to prepare the health education specialist to select, implement, and evaluate strategies designed to promote individual and/or community wellness. Individuals are prepared to function as health educators in the setting of business and industry, medical care, governmental, and tax-supported agencies. A school/community health program option is also available which is designed to prepare students to obtain teacher certification in school health education as well as gain skills and experiences in community health settings.

Interdisciplinary Program in Health Policy Research

The Interdisciplinary Health Policy Research master's degree is available to persons with a baccalaureate degree with a GPA of 3.0 and a score of 1500 on the quantitative, qualitative, and analytic sections of the GRE. The thirty-six (36) semester hours include courses in health, research, internship, and capstone research project as well as electives which are clustered into options. The graduate will be qualified to compile and analyze large data bases and work in the private or public sector. For additional information, see the "Interdisciplinary Program in Health Policy Research" chapter in this *Graduate Bulletin*.

Interdisciplinary Curriculum in Health Services Administration and Policy

The interdisciplinary curriculum in health services administration and policy is organized to train managers, policymakers, and researchers who will be able to respond to and help shape the rapidly changing health care arena.

The interdisciplinary curriculum draws upon faculty interest and expertise in health services administration and policy from throughout the University, including faculty from business, economics, human sciences, public administration and policy, sociology, social work, and urban and regional planning. The program consists of three core courses and two electives that students can choose from. The three core courses, health policy and public administration, health institutions and social policy, and health care finance, provide students with the fundamental knowledge and skills required for any future work within health care policy and administration. Students choose from a range of additional courses to build upon this core. Specific degree programs may require or allow additional courses. Depending upon a student's choice of electives, the program will emphasize either policy or administration. For additional information, see the "Health Services Administration and Policy" chapter in this *Graduate Bulletin*.

School of Nursing

The School of Nursing offers a master's degree program. Graduates are educated for a variety of advanced practice nursing roles, with an emphasis on nursing education, case management, clinical nurse specialist, and nurse practitioner roles. The graduate program leading to a master of science degree in nursing, or a master in nursing degree for a non-thesis option, is focused on the clinical specialties in family and community nursing.

Department of Nutrition, Food and Exercise Sciences

The Department of Nutrition, Food and Exercise Sciences' mission is to contribute to the prevention of chronic disease through the conduct of applied and basic research and strong teaching programs that prepare the next generation of scholars and practitioners.

The Department of Nutrition, Food and Exercise Sciences provides students with a sound foundation in the scientific aspects of nutrition, foods and physical activity through its master's and doctoral programs. Programs are dedicated to training skilled researchers and practitioners in techniques necessary for effective intervention for the prevention of chronic disease. The 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 chemistry, exercise physiology, and motor behavior. Students may pursue degrees at the master's and doctoral level with options in nutrition, food science, exercise physiology and motor learning/control. Master's students are trained as health practicioners in cardiac rehabilitation, exercise test technologists, dietetics, sports nutrition, fitness, nutrition education and health promotion, and food science. Doctoral graduates are prepared for traditional university teaching and research positions. Additionally, food science graduates are being recruited by the food industry.

School of Social Work

Social work is the professional activity of helping individuals, groups, and communities to enhance or restore their capacity for social functioning and to create societal conditions favorable to their goals. Social work practice consists of the professional application of values, ethics, principles, techniques, and research focused on helping people to obtain tangible services; providing counseling and psychotherapy for individuals, families, and groups; helping communities to provide or improve social and health services; advocacy; and participating in relevant policy, administrative, and political processes. The practice of social work requires knowledge of human development and behavior; social, economic, and cultural institutions; current trends in social policy and research; evidence-based practice, as well as how all these factors interact. The program offers students practice experience via a comprehensive internship program.

The School of Social Work offers curricula leading to a master's degree in social work (MSW), with concentrations in clinical and social policy and administrative practice, and a doctor of philosophy (PhD), along with several certification programs.

Sport Management, Recreation Management and Physical Education

The Department of Sport Management, Recreation Management and Physical Education offers master's and doctoral degree programs in physical education with specializations in teacher education and sport administration, and a master's degree program in recreation and leisure services administration.

Certificate Program and Interdisciplinary Specialization in HEALTH SERVICES ADMINISTRATION AND POLICY

College of Social Sciences and College of Business

Director: Allen W. Imershein

The Interdisciplinary Specialization in Health Services Administration and Policy is organized to train managers, policymakers, and researchers to respond to, and help shape, the rapidly changing health care arena. The interdisciplinary specialization emphasizes areas of faculty interest and expertise in health services administration and policy. The faculty is from the following disciplines: business, economics, human sciences, public administration and policy, sociology, social work, and urban and regional planning. The program consists of three core courses and two electives. The three core courses, health policy and public administration, health institutions and social policy, and health care finance, provide students with the fundamental knowledge and skills required for future work within health care policy and administration. Specific degree programs may require or allow additional courses.

A certificate program in this area is also available. Consisting of the three core courses identified below, plus two electives, this program is designed to provide knowledge and skills required for present and continuing work in health services administration. Application to the certificate program is made to the director.

Degrees are granted through specific departments that participate in the program. Existing degree programs are described below along with the general course listings.

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 three core courses, two 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.

PAD	5846r	Health Policy and Public Administration (3)
PAD	5935r	Seminar in Public Administration: Selected Topics [Health Care Finance] (1–3)
SYO	5405	Health Institutions and Social Policy (3)

Electives

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	5935r*	Seminar in Public Administration: Selected Topics [Contracting] (1–3)
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

Chair: Neil Jumonville; *Associate Chair (Graduate Studies):* Green; *Associate Chair (Undergraduate Studies):* Strait; *Professors:* Anderson, Betten, Greaves, Halpern, Horward, J. Jones, M. Jones, Jumonville, Lo, Oldson, Richardson, Ripley, Singh, Tanenbaum, Wynot; *Associate Professors*: Conner, Garretson, Grant, Green, Hadden, Sinke, Stoltzfus, Strait; *Assistant Professors:* Childs, Creswell, Davis, Gray, Herrera; *Visiting Assistant Professors:* Casanovas, Friedman; *Professors Emeriti:* Bartlett, Bryant, Keuchel, Moore, Rogers, Turner

In a concerted 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, Latin American, and Asian 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 located in Tallahassee as well 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 member has been named Robert O. Lawton Distinguished Professor of History, the highest distinction the university faculty bestows on its members. Two members have been named Dis-

tinguished 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. As an interdepartmental and intercollege program, faculty from throughout the University offer courses. 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 U.S. Over a dozen students from throughout the country are currently enrolled in the institute and over 65 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 the experiences of the wartime generation. Housing thousands of letters, diaries, photos, and interviews, The Florida State University history department's WWII Archive 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) are mirrored in the messages sent home to family and friends. In a remarkable fashion this documentary legacy of the early 1940's 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 in history and PhD in history. Thirty (30) semester hours of undergraduate work in history are ordinarily required 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 a minimum score of 1100 on the verbal and quantitative portions of the Graduate Record Examination (GRE). In addition to the University application (on-line at *http://admissions.fsu.edu*), a departmental application must be submitted, including two letters of recommendation and a statement of goals. All materials must be received by March 1st to be considered for fall admission. Spring admissions are considered in exceptional cases; the deadline is October 1st. Meeting the minimum requirements does not guarantee acceptance into a 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 (30) semester hours of graduate work, six (6) of which must be in HIS 5971r, Thesis. As part of the thirty (30) hours, the student must take two seminars or colloquia (one of which must be in the major field) 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), satisfactorily complete comprehensive examinations, and write an acceptable thesis.

Master's Program in Historical Administration and Public History

Director: Valerie Jean Conner, Associate Professor of History; *Visiting Associate Professors:* Clark, Golding, Matthews, Sellers, Young

The program in historical administration and public history (HAPH) prepares students to enter historically oriented careers in fields such as archives, historic site identification and preservation, museum administration, information and records management, and careers in the private sector and governmental agencies.

Admission Requirements

In addition to the requirements which must be met by all students beginning graduate study at the University, a candidate for admission to this program must ordinarily have completed eighteen (18) semester hours of college history or subjects with major historical emphasis.

Program Overview

Students must complete a minimum of forty-five (45) semester hours of graduate work, including fourteen (14) semester hours in the professional training courses listed below and a minimum of four (4) semester hours in an internship. In addition, students must take HIS 6055, Historical Methods/Public History, fulfill the language requirement, satisfactorily complete comprehensive examinations, and must write a professional paper related to the internship (or an acceptable thesis).

Professional Training Courses for All HAPH Students

To fulfill the professional training requirement, students must take the five courses listed below. There may be additional requirements depending upon the student's specialty.

HIS	5077	Oral History (4)
HIS	5082	Archives Management (3)
HIS	5083	Historic Sites Identification and Preservation (3)
HIS	5084	Museum Management (3)
HIS	5932	Graduate Tutorial in History (1)

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: nine (9) semester hours in HAPH courses: HIS 5082, 5083, 5084.

PhD: nine (9) semester hours in HAPH courses: (HIS 5082, 5083, 5084) and four (4) credits in internship.

Master's in History: War and Society Emphasis

In addition to the standard presentation of military history, students will be able to choose from a significant 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 will choose 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 1800; United States, 1800–1900; United States since 1900; 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 18th-century Europe (to 1815), 19th-century Europe (1815–1914), 20th-century Europe (1914 to the present), British history, and modern Russia. An Asian history major is available with a concentration in India or the Middle East. Doctoral students may major in Central Eurasia and the Middle East, a comparative program emphasizing the nineteenth and twentieth centuries and embracing the Ottoman, Russian, Hapsburg, Indian, and Chinese empires. Doctoral students may also major in Latin American history or history of the Atlantic world. 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; Teaching History at the College Level (HIS 6941) is strongly recommended. Doctoral students must also take four 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 — History: General
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 5149. Thomas Jefferson's America (4). Examines the political and cultural history of the United States from the first presidential election through the "Era of Good Feelings." In 1789, the leaders of new government faced a difficult and confusing task: they needed to build working political institutions out of the Constitution's vague instructions and at the same time create a stable, unified nation out of a divided and scattered collection of societies and peoples. The young republic also had to deal with a series of wars and crises in which it was not a great world power. The events of this period determined, even more than those of the Revolution itself, what type of nation the United States would become. Considerable attention will be devoted to Thomas Jefferson as a figure who both shaped and represented his era.

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 5178. Post– Civil War, 1865–1890 (4). An analysis of post–Civil War America with emphasis on the Black role in American society and the attempt to heal the wounds of the Civil War. Other topics include the rise of big business, labor unions, and the last frontier.

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 19th 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, postindustrialism, and affluence. Examines the growth of cultural criticism as a task required of the 20th-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 "regular" 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 5447. History of the Frontier to 1865 (4). Examines the Westward Movement from 1763 until 1865. Social, political, economic, and military aspects of the frontier experience and the significance of the frontier in American history are examined.

AMH 5469. Urban America Since 1879 (4). The development of American cities and the attempts to deal with changing urban problems from 1879 to the present.

AMH 5517. United States Foreign Relations to 1900 (4). Acquaints students with the major interpretations of America's rise to world power and provides them with training in the use of primary sources.

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 19th 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 5564. Women in Modern America (4). Examines the experiences and contributions of women in twentieth-century America, with particular attention to the forces that served to differentiate the opportunities and roles of women from those of their male peers.

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 5568. Colonial and Revolutionary Era American Women's History (4). Course explores the lives of Native American, African, and European women before they came into contact in America, how that contact altered their patterns of behavior, and how major events in America affected women's lives.

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 5645. Humor and the American Mind (4). This course discusses American intellectual and cultural history from the 18th-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.

HIS 6148. American Historiography (4). A study of American historians from Parkman to the present. Treats historians as thinkers who contributed to the larger themes and debates of American intellectual history. An examination of the progression of historical "schools" and their arguments with each other over historical and political assumptions.

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 5406. China to 1898 (4). A study of China from Han through the Hundred Days' Reform of 1898.

ASH 5408. China Since 1898 (4). A study of China from the Boxer Uprising through the Kuomintang and Communist Revolutions.

ASH 5447. History of Modern Japan (4). An examination of the history of Japan from its emergence as a modern state in the mid-19th century, through its defeat in World War II, to its current position as a leading economic power. Focus on political and social evolution, empire building, postwar reconstruction, and United States-Japan relations.

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.

ASH 5559. Modern India (4). An introduction to the history of India from the eighteenth century to the present. Deals in depth with the impact of British rule on India and the lives of modern South Asian leaders such as Gandhi, Nehru, and Jinnah.

Classical History

Note: the following courses are offered through the Department of Classical Languages, Literature, and Civilization.

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 (6) 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 (6) 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 Socialisms impact on German institutions and racial consequences.

EUH 5507. 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 5516. Tudor England (4). The history of England from the late fifteenth century to 1603. Attention will be given to the history of Scotland and Ireland in this period and to political thought, culture, and literature.

EUH 5518. Stuart England (4). 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 20th 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 20th-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 comparitive perspective.

Latin American History

LAH 5439. History of Mexico (4). Covers the history of Mexico from the great Indian empires to the present, emphasizing the 19th and 20th 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 5609. History of Brazil (4). The history of Latin America's largest and most populous nation from its colonial origins to the present. Special topics such as recent democratic and authoritarian political regimes and the role of the military are treated in detail.

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 5082. Archives Management (3). The nature of archives; various types of records; arranging and processing archives; restoring and protecting records; archival institutions, policies, and procedures.

HIS 5083. Historic Sites Identification and Preservation (3). The identification, preservation, and maintenance of historic sites; the historic preservation movement.

HIS 5084. The Management of Historical Sites and Museums (3). The history and purposes of museums; problems of operation; types of exhibits and programs; publications and other interpretive devices; public relations; basic budgetary procedures.

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 (8) semester hours.

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 (12) semester hours; however, only a maximum of four (4) 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 (5) semester hours; however, only a maximum of three (3) 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's permission. Selected topics in history. A maximum enrollment of five (5) students in each tutorial. May be repeated only once and to a maximum of four (4) 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 (12) semester hours as topics vary.

HIS 5940r. Supervised Teaching (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

HIS 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours of credit is required.

HIS 6055. Historical Methods/Public History (4). Offers an intensive introduction to the writing skills required of a public historian. Emphasis will be placed on the development of professional-level writing and research techniques in the areas of archival studies, historic preservation and museum management, and collection.

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 6909r. Directed Individual Study (1–4). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

HIS 6910r Directed Individual Research (1–3). (S/U grade only.) May be repeated to a maximum of three (3) 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 (64) 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 (24) semester hours of credit is required.

HIS 8964r. Preliminary Doctoral Examination (0). May be taken twice.

HIS 8966r Master's Comprehensive Examination (0).

HIS 8976r. Master's Thesis Defense (0).

HIS 8985r. Dissertation Defense (0).

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 HUMANITIES

College of Arts and Sciences

Director and Graduate Adviser: Leon Golden, Professor of Classics; *Associate Director and Graduate Adviser:* Darst, Professor of Modern Languages and Linguistics; *Graduate Advisers:* Crook, (English); Cloonan (Modern Languages and Linguistics); *Coordinator of Undergraduate Advising:* Reis; *Graduate Faculty:* Brewer (Music), Efimov (Modern Languages and Linguistics), Fleming (Modern Languages and Lienguistics), Grindal (Anthropology), Kelsay (Religion), Laughlin (English), Levenson (Religion), Mueller (Classics), Picart (English), Saladin (English), Sandon (Religion), Seaton (Music), Standley (English), Weingarden (Art History)

Two master of arts programs are offered. One, offered in conjunction with the College of Education, is designed primarily for the student whose immediate professional objective is teaching in a two-year college. The other provides a graduate Liberal Studies degree program in the humanities and the arts. The doctoral program, leading to the doctor of philosophy degree in humanities, has been designed to offer qualified students a broad program combining offerings from the participating departments of Anthropology; Art History; Classical Languages, Literature, and Civilization; Communication; Dance; English; History; Modern Languages and Linguistics; Music; Philosophy; Religion; and the School of Theatre. This program provides 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 director of the program to approve course work for the following term.

Requirements for the Interdepartmental Master's Program in Humanities

Please review all college-wide requirements summarized in the "College of Arts and Sciences" chapter in this *Graduate Bulletin*.

The Junior College Instructors Program

On the master's level, the humanities department offers a thirty-six (36) semester hour nonthesis program with the following requirements. For admission: 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. For the degree: 1) nine (9) semester hours minimum in professional education courses— EDH 5054, 5305, and 5306; 2) nine (9) semester hours in HUM 5227, 5245, and 5253; 3) nine (9) semester hours minimum in the department of the undergraduate major; and 4) nine (9) semester hours in a cluster of courses from at least two other departments in the humanities area, focusing on one cultural period. In addition, certification of competency in reading a foreign or classical language, a comprehensive examination, and an internship are required.

The Humanities and the Arts

On the master's level, the humanities department offers a thirty-three (33) semester hour nonthesis program with the following requirements.

Admission

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 (3) letters of recommendation.

Requirements

1) nine (9) semester hours in HUM 5227, 5245, and 5253; 2) twelve (12) semester hours of courses focusing on a specific cultural period or theme; and 3) twelve (12) 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 (ART); 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 may be taken.

In addition, certification of competency in reading a foreign or classical language and a comprehensive examination are required.

The master's degree requirements are fulfilled through regular course work. 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 course work.

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*.

Normally students will 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 director 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 will be required to complete an MA degree in humanities or in one of the participating departments in the humanities area before being admitted to the doctoral program. Three (3) letters of recommendation are required by the humanities program, as part of the application process. Students will be 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 score of 1000 or higher is required on the Graduate Record Examinations (GRE), both verbal and quantitative parts, and a minimum grade point average of 3.0 or higher on all work previously attempted.

In consultation with the program director, doctoral students will choose one of two sequences at the required 5000 level. Most students will 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 will 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 program director), a sequence of nine hours of courses such as the following: HIS 5346; LIT 5066r; ARH 5795; PHI 6808r; or MUH 5380; 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 Program Director, 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 (ART); 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 may be taken.

In addition to the required humanities courses, a student will take approximately one half of the course work in the department of concentration (including the work taken at the MA 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 will require eighteen (18) semester hours of work and the minor period or theme will require twelve (12) semester hours of work.

After having finished thirty (30) semester hours of graduate work or being awarded the master's degree, the doctoral student must be continuously enrolled at The Florida State University Tallahassee campus for a minimum of twenty-four (24) graduate semester hours in any period of twelve (12) consecutive months. The residency requirement can be completed with either course work or dissertation hours.

In most instances students should assume that two years of full time residence beyond the master's degree will be required to fulfill course requirements. Upon completion of all course work, written examinations and oral examinations, an additional twenty-four (24) 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.

The doctoral program, leading to the doctor of philosophy degree in humanities, has been designed to offer qualified students a broad program combining offerings from the participating departments of Art History; Classical Languages, Literature, and Civilization; Communication; Dance; English; History; Modern Languages and Linguistics; Philosophy; Religion; and the schools of Music and Theatre. It offers an enlarged perspective which assists in the understanding of the specialized disciplines in the humanities area.

Definition of Prefixes

HIS — History: General
HUM — Humanities
LIT — Literature

Graduate Courses

HIS 5346. The Study of Intellectual History (3). Methodologies implicit in the study of intellectual history.

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 (9) semester hours.

HUM 5915r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) semester hours may be applied to a master's degree. May be repeated to a maximum of five (5) semester hours.

HUM 5940r. Supervised Teaching (0–5). (S/U grade only.) A maximum of three (3) semester hours may be applied to a master's degree. May be repeated to a maximum of five (5) 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 course work and are preparing for their master's comprehensive examinations or their preliminary doctoral examinations. May be repeated to a maximum of twelve (12) semester hours.

HUM 6939r. Seminar Topics (3). May be repeated to a maximum of fifteen (15) semester hours.

HUM 6980r. Dissertation (1–12). (S/U grade only.)

HUM 8964r. Preliminary Doctoral Examination (0).

HUM 8966r. Master's Comprehensive Examination (0).

HUM 8985r. Dissertation Defense (0).

LIT 5066r. Study of Comparative Literature (3). Methodologies implicit in the study of comparative literature (including the relationship of literature to the other arts). Topics vary from term to term. May be repeated to a maximum of six (6) semester hours.

INDUSTRIAL/APPLIED PSYCHOLOGY
see Psychology

Department of INDUSTRIAL ENGINEERING

FAMU—FSU College of Engineering

Chair: Ben Wang; *Professors:* Awoniyi, Braswell, Wang; *Associate Professors*: Pignatiello, Simpson, Zhang; *Assistant Professor*: Okoli; *Visiting Associate Professors:* Liang, Owusu; *Instructor:* Cutwright

The Department of Industrial 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 Engineering provides an excellent environment for instruction and research. The department has seven laboratories: Affordable Composite Processings, Applied Robotics, Automated Systems, Ergonomics, Optimization and Simulation, Rapid Prototyping/Precision Manufacturing, and Computer Integrated Manufacturing. 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 acquistion, simulation, and process monitoring and control.

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 15 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

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 MSIE, an MSIE with specialization in engineering management, or an MSIE with specialization in global manufacturing leadership. For the traditional MSIE program, students are allowed to choose a thesis or non-thesis option. However, the specialization in engineering management and the specialization in global manufacturing leadership do 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 sucessful 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,
EGN	3613	Principles of Engineering Economy,
EIN	4390C	Manufacturing Processes and Materials Engineering,
ESI	3312C	Operations Research I: Deterministic

a class in FORTRAN, PASCAL, or C (required as evidence of proficiency in programming).

Admission Requirements for Traditional MSIE

- A BS in industral engineering (or a related field) from an accredited college or university, with a GPA of at least 3.0 on all upper-division work;
- Good standing in the institution of higher learning last attended;
- A minimum combined score of 1000 on the verbal and quantitative portions of the GRE;
- A minimum score of 550 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; and
- 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 must also possess: 1) basic skills in computing, and 2) Calculus III or its equivalent.

Admission Requirements for MSIE with Specialization in Global Manufacturing Leadership

Requirements for admission to this program are identical to the MSIE admission requirements, except that applicants must obtain a minimum score of 550 on the TOEFL.

Degree Requirements

Thesis Option

Each MSIE student who intends to complete a thesis is required to take a minimum of thirty (30) semester hours (twenty-four [24] semester hours of course work and six (6) semester hours of thesis). At least eighteen (18) semester hours of the course work hours must be taken in the industrial engineering department.

When filing a degree plan, students must specify one of the department's areas of concentration as their major: manufacturing engineering, quality engineering, or industrial systems. There are three sets of courses under the traditional MSIE program: core course, specialization industrial engineering courses and electives.

Core Courses. Every student with the thesis option must take the following courses: 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.

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

Students are required to complete a minimum of thirty-three (33) semester hours of course work at the graduate level, at least twenty-four (24) of which must be taken in the industrial engineering department. The following are the core courses for the non-thesis option:

EIN	5412	Computer-aided Manufacturing (3)
ESI	5247	Engineering Experiments (3)

ESI	5525	Modeling and Analysis of Manufacturing and Industrial Systems (3)
EIN	5936	Graduate Seminar (0)
ESI	5408	Applied Optimization (3)
ESI	5417	Engineering Data Analysis (3)
ESI	5451	Project Analysis and Design (3)
[Choose one]		
ESI	5154	Statistical Process Control (3)
or		
ESI	5228	Introduction to ISO 9000 (3)

Specialization in Engineering Management

Students are expected to complete thirty-three (33) 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.

Specialization in Global Manufacturing Leadership

Students are expected to complete thirty-two (32) 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

The PhD in industrial engineering is designed for students and professionals who wish to pursue academic careers or to acheive advanced standing in the field. The general requirement is a minimum of seventy-two (72) semester hours of work beyond the baccalaureate degree, excluding any credits earned for a master's degree thesis, or a mimimum of forty-eight (48) semester hours beyond the master's degree.

Typically, twenty-four (24) of the seventy-two (72) 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, twenty-four (24) must be letter-graded course work combined with a minimum of twenty-four (24) additional hours of dissertation research. The course work beyond the master's consists of: 1) eighteen (18) semester hours of breadth-requirement core courses, and 2) six (6) 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.

Admissions

Applicants must meet the following mimimum 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 on all upper-division undergraduate work, and at least 3.4 GPA on master's degree work;

2. Be in good standing at the institution of higher learning last attended;

3. Have a minimum combined score of 1100 on the verbal and quantitative portions of the Graduate Record Examination (GRE);

4. Have a minimum score of 600 on the TOEFL (international students only);

5. Three letters of recommendation, addressed to the Director of Graduate Studies, assessing the applicant's potential to do graduate work; and

6. 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: STA 5106, Computational Methods in Statistics I; STA 5107, Computational Methods in Statistics II; STA 5325, Mathematical Statistics; ESI 5408, Applied Optimization; ESI 5247, Engineering Experiments; ESI 5525, Modeling and Analysis of Manufacturing and Industrial Systems.

Preliminary Examination

Following completion of a major portion of the course work 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. This examination normally takes the form of a dissertation proposal.

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. 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 — General Engineering
EIN — Industrial Engineering
EMA — Materials Engineering
ESI — Industrial Engineering (Systems)

Graduate Courses

EIN 5114C. Computing Topics in Industrial Engineering (3). Prerequisite: COP 3221 or CGS 2402. State-of-the-art computing techniques for industrial engineers. Integration of structured programming, database management systems, mathematical analysis techniques, GUI interface languages and Internet networking principles. Design, development, debugging, and management of complex computer-based projects.

EIN 5245. Human Physical Capabilities (3). Prerequisite: EIN 4243C. An examination of the biomechanical and physiologic characters of people related to work and work environments.

EIN 5322. 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 5336. Production Control (3). Prerequisite: ESI 5417. Introduces basic concepts and fundamentals of both production and operations analysis and planning and control. Topics include forecasting, aggregate planning, inventory control, materials requirements planning, operations scheduling, capacity management and case studies.

EIN 5353. Engineering Economic Analysis (3). Prerequisites: EGN 3443; 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 5399. Concurrent Engineering (3). Prerequisite: Graduate or senior standing with permission of instructor. 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 5412. Computer-aided Manufacturing (3). Prerequisite: EIN 3390C. CAD/CAM. Numerical Control (NC) and Computer Numerical Control (CNC). Programmable automation. Computer-aided process planning.

EIN 5413. Computer Aided Process Planning (3). Prerequisites: CGS 3408; EGN 2123; EIN 3390C, 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 5418. Assembly Methods and Systems (3). Prerequisite: EIN 5392. Review of material joining processes and basic assembly operations. Principles of "Design for Assembly," and applications. Designing for automated assembly, and applications. Intelligent assembly systems and applications. Micro-scale component assembly, with applications to electronic circuit board assembly and related problems. Case studies and design exercises.

EIN 5524. System Modeling and Simulation (3). Prerequisites: CGS 3460; EGN 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 5905r. Directed Individual Study (1–3). (S/U grade only.) Prerequisite: Instructor permission. May be repeated to a maximum of six (6) 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; 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 (9) semester hours.

EIN 8976r. Master's Thesis Defense (0). (S/U grade only.)

EMA 5182. Composite Materials Engineering (3). 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 5154. 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: Permission of instructor. Introduction to the ISO 9000 quality system standards. Quality auditing. Audit report writing. Documenting the requirements. Case studies and demonstrations.

ESI 5247. Engineering Experiments (3). Prerequisites: EGN 3443; 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 advisors to experimentation in industrial settings. Students must have an understanding of basic statistical concepts. A statistical approach to designing and analyzing experiments is provided as a means to efficiently study and comprehend the underlying process being evaluated. Insight is gained that leads to improved performance and quality.

ESI 5248. 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 5417. 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 5451. Project Analysis and Design (3). Prerequisites: EGN 3613; 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 4523, 5408, 5524. Modeling and analysis of material flow systems, flow-shop and job-shop scheduling, material handling system analysis, mathematical and simulation modeling for general manufacturing and industrial systems.

ESI 5580. Applications of Knowledge Engineering (3). Prerequisite: CGS 3460. Industrial engineering problem solving and system design applications of results from areas such as expert systems, automated reasoning, knowledge acquisition, knowledge representation, neural networks, etc. With the approval of the Industrial Engineering Department's Curriculum Committee, a suitable computer science course may be supplemented with industrial engineering projects in order to form a substitute for this course.

Doctoral

EIN 6126. Global Manufacturing Strategy (3). Prerequisites: EIN 5399, 5408, 5524. Course topics include strategic planning for global alliancing international standards affecting manufacturing policy making and strategy formulation, world-class manufacturing strategy and practice, and case studies.

EIN 6357. Advanced Engineering Economy (3). Prerequisites: EGN 3443; ESI 5451. Economic analysis of capital expenditure decisions. Financial mathematics and microeconomics. Decision under risk and uncertainty. Game theory and utility theory.

EIN 6416. Manufacturing Systems Analysis (3). Prerequisites: EIN 5524; ESI 5524. Review of manufacturing fundamentals, different approaches of system design, tools for analyzing manufacturing systems, and metrics for evaluating manufacturing system performance. Case studies and design exercises.

EIN 6419. 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 stackup, 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 6609. Advanced Computer Numerical Control and Application (3). Prerequisites: EIN 5392, 5398, 5408. Theory and applications of advanced numerical control for machining centers, turning centers, and other manufacturing applications. Topics include programming features with advanced implications, techniques with tool offsets, CNC technique with specific machine and tool operations, parametric programming techniques, minimizing CNC execution time, and CNC accessory devices. Case studies and design exercises.

EIN 6980r. Dissertation (3–24). (S/U grade only.) Prerequisite: Doctoral candidate standing. Mandatory class for all Ph.D. seeking students. May be repeated to a maximum of forty-eight (48) semester hours.

EIN 8964. Preliminary Doctoral Examination (0). (S/U grade only.) Prerequisite: Doctoral candidate standing.

EIN 8985r. Dissertation Defense (0). (S/U grade only.) Prerequisite: Doctoral candidate standing.

ESI 6498r. Advanced Topics in Optimization (1–9). Prerequisite: ESI 5408. Depending on the research interests of the students and the instructor, this course shall cover advanced topics in optimization and their applications in industrial engineering. Each student shall produce a tutorial paper on an optimization problem/topic to be approved by the instructor.

INDUSTRIAL/APPLIED PSYCHOLOGY
see Psychology

INFORMATION STUDIES

School of Information Studies

Professors: Blazek, Dresang, Hart, McClure, Robbins, Wiegand; *Associate Professors:* Bertot, K. Burnett, Gathegi, C. Jorgensen, Latham*; Assistant Professors*: Belton, Burke, G. Burnett, Genz, Shim; *Visiting Assistant Professors:* Gross, Heo, P. Jorgensen, Kazmar, Marty*; Other Personnel:* Arbogast de-Hubert-Miller, Brooks, Buerkle, Chavez-Hernandez, Chow, Dulaney, Kotrla, Miner, Phelps, Reist, Stromberg; *Visiting Instructor/Librarian:* Montague; *Professors Emeriti:* Aaron, Conaway, DePew, Hunt, Jahoda, Logan, Summers, Trezza

The School of Information Studies offers a master of science degree program and a master of arts degree program in library and information studies. Both degrees are accredited by the American Library Association. The school also offers a specialist degree and a doctor of philosophy degree.

For complete details of degree requirements, plus a description of the school, its facilities, opportunities, and available financial assistance, refer to the "School of Information Studies" chapter of this *Graduate Bulletin*.

Definition of Prefix

LIS — Library and Information Studies

Advanced Undergraduate Courses

LIS 4264. Systems Approach in the Information Environment (3). Prerequisites: CGS 2060, 3408 and MAC 1105. An introduction to the systems approach for problem solving in an information seeker's environment. The theories and concepts of information science are integrated with a variety of practical tools for the structured design and analysis of information systems.

LIS 4266. Theory of Information Retrieval (3). Prerequisites: LIS 3267, 4276, 4351. The theory of information retrieval for both text and picture materials. Discussion of various retrieval, query, and knowledge representation methods beyond Boolean models, including vector, probabilistic edge-detection, 2D strings, and associative network models. Elaboration of concepts of retrieval performance, efficiency and effectiveness beyond precision and recall. Retrieval issues of user-interfaces and hypertext are explored.

LIS 4276. Quantitative Methods in Information Studies (3). Prerequisites: CGS 2060, 3408; LIS 3602; MAC 1105; senior standing or consent of instructor. Details practical methods for collecting and analyzing quantitative data. Includes hypothesis testing, analysis of variance, contingency tables, correlation and experimental design.

LIS 4277. Usability and Usefulness of Information Systems (3). Prerequisites: LIS 4276. Introduces students to the concepts of cognitive and human information processing, their application to information systems design, and the assessment of the usability and usefulness of information systems.

LIS 4301. Electronic Media Production (3). Prerequisite: LIS 3342.The understandings, skills, and techniques needed for the production and utilization of various types of visual materials. Appropriate laboratory sessions held.

LIS 4351. Interface Design (3). Prerequisites: CGS 3408; LIS 3342 and MAC 1105. An introduction to the basic theory of computer interface design for information specialists and the fundamental concepts and techniques of computer programming.

LIS 4355. Natural Language Processing for the Information Professional (3). Prerequisites: LIS 3267 and 4351. Studies the problems and techniques of processing natural language as an approach to providing information services. Introduces the theory of spoken language and how it differs from theories of computer-generated natural language. Includes language pattern recognition and syntactic inference, and semantic networks as applied to information systems.

LIS 4365. Advanced Web Applications (3). Prerequisite: LIS 4301. 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 4366. Website Development and Administration (3). Prerequisite: LIS 4301. 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 is paid to information provision, and the role of Web developers as providers and managers of information resources.

LIS 4410. Societal Implications of the Information Age (3). Prerequisite: CGS 2060. An introduction to the evolving role of information in the "Information Age." Emphasizes information services in society and contemporary information resources that fulfill society's information needs. Considers the nature of electronic sources of information as well as other information formats and sources.

LIS 4428. Managing Information Resources and Services (3). Prerequisites: Three of the following: LIS 3267, 3602, 4276, and 4351. An introduction to management science and administrative issues as applied to information resources management (IRM), information centers, and information services. An emphasis is placed upon management functions, concepts and principles. IRM definitions and issues. IRM implementation and strategies. Life-cycle management, and career opportunities.

LIS 4482. Managing Networks and Telecommunications (3). Prerequisite: LIS 3342. The fundamentals of networking and telecommunications, as a means of providing information services to users. From LANs to the "Information Superhighway," the course includes an introduction to voice, data, and video telecommunications concepts, technical requirements, and application issues. Includes the techniques and management of communication systems.

LIS 4488. Network Administration for the Information Professional (3). Prerequisite: CGS 3408; LIS 4482. Provides the information and skills necessary to perform competently in the role of network administrator or network system manager within a library and/or information center environment. Introduces students to the design, operation, and management of networked systems from local area networks to the Internet. Includes communication concepts, technical and application issues, with a focus on managing a network.

LIS 4608. Electronic Information Sources and Services (3). Prerequisite: LIS 3602. The basics of on-line services, Boolean logic, formulation of search strategies, and search techniques. On-line time is made available to each student in a major search service, the Internet, and CD-ROM products.

LIS 4722. Information Representation (3). Prerequisites: LIS 3267 and LIS 3602. Course addresses the principles and techniques of organizing non-bibliographic information sources including unpublished and transitory materials such as archival and manuscript collections, business/office records, ephemera and local databases. Course focuses on locally produced resources created for a narrowly defined, specific, and possibly restricted information user group.

LIS 4770. Information and Image Management (3). Prerequisites: CGS 2060 and MAC 1105. Describes the scope and the problems involved in the administrative management of records. Emphasis centers upon the importance of managing and controlling records from the time of their creation until their vital deposition.

LIS 4905r. 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 (6) semester hours.

LIS 4910. Design Problem (3). Prerequisite: Senior standing. An independent enterprise for which a student designs and implements an information studies project, working under faculty guidance.

LIS 4930r. Special Topics in Information Studies (3). Prerequisites: Three of the following LIS 3232, 3267, 3342, 3602, 4276, 4351. A directed and supervised investigation of selected problems, issues, and trends in information studies, with an emphasis on research. It is anticipated that each offering will be different because of the evolving nature of the subject matter. May be repeated to a maximum of six (6) semester hours.

LIS 4938. Seminar in Information Studies (3). Prerequisites: Senior standing and three (3) of the following: LIS 3267, 3602, 4276, or 4351. The intensive reading and preparation of position papers concerning current issues in information studies, followed by discussions of these papers with faculty and information specialists.

LIS 4940r. Internship in Information Studies (1–6). (S/U) grade only). Prerequisite: LIS 3602 and consent of advisor. Acceptable work experience in the information industry that expands and integrates classroom work. (Paid or unpaid internship).

LIS 4941. Internship in School Library Media Centers (1–5). (S/U grade only.) Prerequisite: Admission to teacher education. Practice in administrating a school library media center.

Graduate Courses

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 information seeking behaviors.

LIS 5241. International and Comparative Information Service (3). Course 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 analysis unit is an individual country compared against others chosen from along the spectrum of development. Attention is given to the legal, economic, and infrastructural conditions from a cultural-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. While some practical skills will be taught, the major emphasis is in understanding information studies and the workings of information retrieval systems and users.

LIS 5263. Theory of Information Retrieval (3). Theory of information retrieval for both text and picture materials. Discussion of various retrieval, query, and knowledge representation methods beyond Boolean models, including vector, probabilistic, edge-detection 2-D strings, and associative network models. Elaboration of concepts of retrieval performance and effectiveness beyond precision and recall. Relevant issues of user interfaces and hypertext are explored. Required for information studies majors.

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 to assess their quality and impact, emphasizing assessment in public and governmental sectors. This course describes how to develop performance measures and statistics to describe and assess networked information services and systems.

LIS 5271. Research in Information Studies (3). An introduction to basic and applied research in information studies, the course assumes no background in research methods of statistics. It provides an overview of the methods information professionals use to collect information about empirical phenomena for the enhancement of information use and service delivery.

LIS 5275. Usability Analysis (3). Design, execution, and reporting of tests for the usability of information products and services. This includes cost justifying assessments and the human cognition concepts required for information processing.

LIS 5313. Design and Production of Media Resources (3). Prerequisites: Core experience and media threads or LIS 4301, or equivalent. Techniques for designing, producing, and evaluating media sources which meet specific instructional needs.

LIS 5316. Information Graphics (3). The theory and use of the graphic presentation of sound and text within both paper and electronically displayed information. Includes critical evaluation, semiotics and cognitive theory.

LIS 5344. Web Site Development and Administration (3). Prerequisites: LIS 5230, 5340. Issues and techniques related to the planning, production, and management of large World Wide Web Sites, including information on 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 5350. Design and Development of Computer Information Retrieval Systems (3). Development of an information retrieval system using the principles and concepts of modern programming languages. Introduces the concepts and techniques of computer programming, focusing on data processing, file operations, and retrieval techniques as applied to an information studies environment.

LIS 5362. Design and Production of Network Multimedia (3). Course examines the theory, concepts and techniques for designing, producing, and evaluating network multimedia resources to meet specific information needs.

LIS 5367. Advanced Web Applications (3). Prerequisite: LIS 5340. Course introduces the concepts and technical needs of client and server side application technologies for World Wide Web information servers. Teaches students how to evaluate the effectiveness of WWW applications. Acquaints students with resources available for design, production and evaluation of WWW information servers and assists students in developing strategies for locating these sources. Students gain hands-on experience in web application production, including: PERL/CGI, JavaScript, server authentication techniques, synchronized multimedia, and hypertext authoring.

LIS 5408. Management of Information Organizations (3). This course is designed to develop a conceptual framework for integrating fundamental management concepts, principles, policies, theories and practices into an effective, personal management process that relates to information organizations of the 21st century. Students acquire strategies for developing cohesive, productive management teams through experiential learning.

LIS 5411. Introduction to Information Policy (3). Examines selected fundamental public policy questions relating to information use, access, and dissemination, with special attention given to complex policy issues that involve value conflicts among information ownership rights, personal privacy rights, and public access rights to information. It focuses on constitutional principles, statutory provisions, laws and regulations, and federal and state policies.

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 5415. Socio-Political Process in Information Studies (3). Analysis of the position of the library within the legal and societal power structure, with consideration of alternatives for effecting desired changes. An understanding of the librarian's role in the political process at the local, state and federal levels.

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 5455. Leadership and Human Resources Management in the School Library Media Program (3). The course is designed to give an understanding of the attitudes, knowledge, and skills necessary to manage human resources and provide effective leadership in a school library media program.

LIS 5484. Introduction to Data Networks for Information Professionals (3). An introductory course in the use of networks and telecommunications to provide information. It deals with theoretical, conceptual, and technical requirements, as well as management issues of modern data networks.

LIS 5487. Information Systems Management (3). An introduction to the role of information systems in organizations and how this relates 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 and focuses on managing a network.

LIS 5511. Management of Information Collections (3). The principles of collection development and intelligence gathering, including selection, acquisition, distribution, circulation, preservation, and deselection of information resources.

LIS 5512. School Collection Development and Management (3). Introduces the student to the principles, policies, and applications of collaborative school collection development and management. Concepts include the national, state, community, and school contexts that affect a media specialist's selection, evaluation, acquistion, access to, and maintenance of resources in a school media program.

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 5564. Information Needs of Children (3). Materials for children in relation to their needs, interests and abilities. Evaluation and use of printed and audio-visual 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 printed and audio-visual 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 explore 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). Course covers selection criteria, aids in selection and evaluation of materials relative to adult needs, and publishing and production trends. Emphasis is on contemporary print and nonprint materials for public library collections.

LIS 5603. Introduction to Information Services (3). Introduction to reference work using both print and online sources. Also addresses the relationship of reference work to other information services in libraries and other information-providing agencies.

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; and the information object and its relationship to organizing systems and to other information objects.

LIS 5711. Cataloging and Classification (3). Prerequisite: LIS 5724. Practical approach to cataloging and classification in an on-line environment of book and non-book material, including: descriptive cataloging, subject analysis and classification of information resources in library systems. This course is appropriate for library studies majors.

LIS 5736. Indexing and Abstracting (3). Prerequisite: LIS 5724. Practical approach to indexing and abstracting, emphasizing the online environment. Covers manual and automatic processes and methods of abstracting and indexing, database organization and design. This course is appropriate for information studies majors.

LIS 5737. Subject Analysis (3). Examines theories of subject analysis of the major verbal and classificatory systems. Approaches such as classification schema, indexing, facet analysis, thesauri, and abstracting; and issues such as user-focused analysis, vocabulary, politics, human vs. automatic analysis, perspective, granularity, etc. are covered. Looks at subject analysis across contexts; appropriate for both library science and information science majors.

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 data models and several database models. Also considers the administrative tasks associated in the database management environment.

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 (6) semester hours.

LIS 5916r. Issues in Information Studies (1–3). Prerequisites: LIS 5230; consent of the instructor. 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 (12) semester hours as content varies.

LIS 5945r. Internship (1–12). (S/U grade only.) An opportunity to learn how library and/or 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 to a maximum of twelve (12) semester hours with permission of faculty supervisor.

LIS 5971r. Thesis (3–6). (S/U grade only.) May be repeated to a maximum of six (6) semester hours.

LIS 6205. Issues in Information Behavior (3). Course prepares doctoral students to do research focusing on an aspect of information behavior through the examination of the art of discovering issues in Information Behavior. The seminar will introduce a range of techniques applied to the analysis of information behavior, with a focus on ethnographic methodologies.

LIS 6269. Seminar in Information Science (3). Developments in information science and technology including content analysis, bibliometrics, management information systems, and telecommunications networks. 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; 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). Data collection, analysis, and interpretation; preparation of designs for conducting individual research in information studies. Repeatable one time. Six (6) semester hours required of all doctoral students.

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 6409. Seminar in Library Administration (3). Current problems in information organization including planning, personnel, control, finance, and evaluation functions, in both profit and not for profit information service organizations.

LIS 6662. Seminar in Information Policy (3). Identifies/analyzes selected issues related to government information policies, and considers policy alternatives to better access state/federal information. Examines research methodologies to investigate information policies.

LIS 6759. Seminar in Intellectual Access (3). This course is 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 to a maximum of eight (8) 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.

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: cataloging and classification; work with the disadvantaged; children and youth services; academic, public, school, and special libraries; administration; information science. It is anticipated that each offering will be different because of currency and the changing nature of the subject matter. May be repeated to a maximum of six (6) semester hours.

LIS 6980r. Dissertation (1–12). (S/U grade only.)

LIS 8964r. Doctoral Preliminary Examination (0).

LIS 8966r. Master's Comprehensive Examination (0).

LIS 8976r. Master's Thesis Defense (0).

LIS 8985r. Dissertation Defense Examination (0).

INSTITUTIONAL RESEARCH
see Educational Leadership and Policy Studies

INSTRUCTIONAL SYSTEMS
see Educational Psychology and Learning Systems

Department of INTERIOR DESIGN

SCHOOL OF VISUAL ARTS AND DANCE

Chair: David Butler; *Associate Chair:* Munton; *Associate Professors:* Butler, Koenig, Munton, Myers, Ohazama, Waxman; *Assistant Professor:* Navarro; *Adjunct Faculty*: Brunner, Camp, Field, Williams

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 master of science first professional degree consists of a minimum of fifty-nine (59) semester hours. Candidates without an undergraduate degree in interior design must complete a series of foundation courses and must pass a portfolio review prior to beginning the program or they may incorporate these courses into their first two semesters of study. These foundation courses do not apply to the minimum fifty-nine (59) semester hours required to post the degree.

The master of science and master of arts specialization and research degree programs require a minimum of thirty-two (32) semester hours. These programs are intended for candidates with an undergraduate degree in interior design or a closely related discipline. Focus is on specialized research to enhance professional potential through research, research-project or thesis preparation. Candidates requesting the master of arts degree title must comply with the university requirements of language and humanities at the graduate level.

The master of fine arts degree program consists of sixty (60) semester hours including six (6) to nine (9) hours of thesis or thesis project. It is primarily intended for individuals who will eventually pursue careers in higher education or specialized research. In order to maintain close faculty supervision only a limited number of candidates are accepted into the MFA program. Final determination is made by the faculty graduate program committee.

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 (3) letters of recommendation, and an interview with the program chair (when appropriate and possible). A minimum 3.0 grade point average from undergraduate studies and a minimum score of 1000 on the verbal and quantitative sections of the Graduate Record Examinations are required.

A graduate minor of twelve (12) semester is available for nonmajors.

Foundation Course

The foundation consists of courses relative to technical and graphic skills in interior design. These works will be compiled in a comprehensive portfolio (graduate portfolio review I) that must be presented to the interior design graduate faculty for continuation in the program of choice. Upon satisfactory completion of graduate portfolio review I, the program of studies will be created individually based on each candidate's needs and the required "core" curriculum.

Definition of Prefix

IND — Interior Design

Graduate Courses

Foundation Course

The foundation is intended as preparation for master's work and will not be counted toward the requirements for the master's degree. Alternate or equivalent course work may be assigned on an individual basis to satisfy this requirement.

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. Credits do not apply to minimum degree requirements.

Other Courses

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 (6) semester hours.

IND 5135r. History of Interiors Seminar II (3). Prerequisite: IND 5105r. Advanced study of history of interiors, furnishings, and architecture of the 17th and 18th centuries. May be repeated to a maximum of six (6)semester hours.

IND 5165r. History of Interiors Seminar III (3). Prerequisite: IND 5105r, 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 (6) semester hours.

IND 5175. History of Designers (2–4). Advanced study of the interior design profession, including research concerning past and present interior designers of note.

IND 5235r. Graduate Studio I (4). Advanced analysis and planning of interior environments. (Studio.) May be repeated to a maximum of eight (8) semester hours.

IND 5236r. Graduate Studio II (4). Prerequisites: IND 5435r, 5235r (studio). Advanced comprehensive design project. May be repeated to a maximum of eight (8) semester hours.

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 (8) semester hours.

IND 5317r. Design Graphics I (4). Advanced detailed study of graphic techniques used in interior delineation. (Studio.) May be repeated to a maximum of eight (8) semester hours.

IND 5425r. Graduate Technical Design (4). Advanced exploration of the technical aspects of interior design. May involve use of the CADD computer. May be repeated to a maximum of eight (8) semester hours.

IND 5435r. Graduate Lighting Seminar (4). Details study of lighting and electrical plans, reflected ceiling plans, calculations, and acoustics. (Lecture/Studio.) May be repeated to a maximum of eight (8) semester hours.

IND 5526. Graduate Portfolio Review II (1). (S/U grade only.) A faculty review of all graduate student work after completion of the program. All students MUST register for this course at the same time as IND 5236. 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 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 (12) semester hours.

IND 5911r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (8) semester hours as topics vary.

IND 5944r. Field Research in Space Organization (1–8). A maximum of eight (8) 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 (3) semester hours. A maximum of three (3) 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 (12) semester hours.

IND 5971r. Thesis (2–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

IND 8966r. Master's Comprehensive Examination (0).

IND 8976r. Master's Thesis Defense (0).

Program in INTERNATIONAL AFFAIRS

College of Social Sciences

Director: Burton Atkins, Department of Political Science

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 (10) semester hours. A dual degree program is also offered in cooperation with the College of Law.

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 10 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 University and college fellowships, as well as the program's own graduate assistantships.

London Summer Program

International affairs students are encouraged to participate in the program's intensive session held each summer in Europe. The program is 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 course work towards 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. All applicants must take the Graduate Record Examinations (GRE) (verbal and quantitative aptitude portions) prior to admission to the program.

It is recommended that the student have undergraduate preparation in those fields where graduate work is contemplated. A committee, appointed by the director of the program, will supervise the degree program of the candidate.

The student may choose between a thirty-two (32) semester hour program or a thirty (30) 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: INR5935r, Special Topics (Colloquium), for one (1) semester hour; INR 5936r, Special Topics in International Affairs (Problems of Globablism), for three (3) semester hours; and INR 5938, Joint Seminar in International Affairs.

2. At least nine (9), but no more than eighteen (18), semester hours in one of the participating departments and school;

3. Course work in at least three of the participating departments and school; and

4. At least six (6) hours focusing on the developing or post-Communist world (i.e., outside of the United States, Canada, Western Europe, Japan, Australia, and New Zealand).

Ten (10) semester hours in the thirty-two (32), or eight (8) in the thirty (30) hour program, may be selected from outside the participating departments and school with the director's approval.

Up to eight (8) semester hours in the thirty-two (32) hour program, or six (6) in the thirty (30) 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 master of arts degree, even if they choose to graduate with a master of science degree. Proficiency in a 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 The Florida State University; 2) satisfactory performance on the Graduate School Foreign Language Tests of the Educational Testing Service; 3) completion of twelve (12) semester hours of college level course work in a foreign language with an average grade of at least 3.0 ("B"); or 4) four years of a single language in high school.

Students may count up to six (6) semester hours of graduate level courses in a foreign language toward the master's degree, as long as those courses represent work over and above that required to fulfill the foreign language requirement.

Required Core Course

Note: a description of the following course can be found under "Graduate Courses" in this chapter.

INR	5935r	Special Topics [Colloquium] (1–3)
INR	5936r	Special Topics in International Affairs [Problems of Globalism] (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.

Anthropology

ANG	5255	Peasant Societies (3)
ANG	5337	Peoples and Cultures of Amazonia (3)
ANG	5491	Seminar in Social Anthropology [Peoples and Cultures of Mexico and Central America] (3)*
ANG	5491	Seminar in Social Anthropology [Peoples and Cultures of Africa] (3)*
ANG	5491	Seminar in Social Anthropology [Peoples and Cultures of Southeast Asia] (3)*

ANG	5491	Seminar in Social Anthropology [Japanese Society and Culture] (3)*
ANG	5491	Seminar in Social Anthropology [Chinese Society and Culture] (3)*
ANG	5701	Applied Anthropology (3)

*Students should check with the Department of Anthropology concerning the availability of these courses.

Economics

ECO	5005	Economic Principles for International Affairs (3)
ECO	5705	International Trade (3)*
ECO	5706	Seminar in International Trade Theory and Policy (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	4333	Transition of Soviet and Eastern European Economies (3)
ECS	5005	Seminar in Comparative Economic Systems (3)
ECS	5015	Economic Development: Theory and Problems (3)

*There are prerequisites for these courses that students in international affairs should discuss with the instructor before registering for them.

Geography

GEA	5195r	Advanced Area Studies (3). (Various regions)
GEO	5425	Cultural Geography (3)
GEO	5472	Political Geography (3)
GEO	5481	Military Geography (3)
GEO	5545	Advanced Economic 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	5406	China to 1898 (4)
ASH	5408	China since 1898 (4)
ASH	5447	History of Modern Japan (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 Detente (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	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)
LAH	5439	History of Mexico (4)
LAH	5475	History of the Caribbean (4)
LAH	5609	History of Brazil (4)
LAH	5749	Social Revolutionary Movements in Latin America (4)
WOH	5246	World War II (4)

Philosophy

PHI	6425r	Philosophy of Social Sciences (3)
PHM	6205r	Social and Political Philosophy (3)

Political Science

CPO	5036	Politics of Developing Areas (3)
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	5557	Seminar in Comparative Government and Politics: Japan (3)
CPO	5644	Russian Politics (3)
CPO	5740	Comparative Political Economy (3)
CPO	5934	Selected Topics (3)
INR	5036	International Political Economy (3)
INR	5037	Development, Dependence, and Inequality (3)
INR	5088	International Conflict (3)
INR	5090	Rational Choice and International Relations (3)
INR	5265	Russian Foreign Policy (3)
INR	5275	Middle East Foreign Policy (3)
INR	5315	Foreign Policy Analysis (3)
INR	5934	Selected Topics (3)

Public Administration

PAD	6836	Comparative/Development Administration (3)

Religion

REL	5195r	Seminar: Religion and Culture (3)
REL	5305r	Seminar: History of Religions (3)
REL	5339	Modern Hinduism (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	5145	Population Policy (3)
SYD	5215	Mortality (3)
SYD	5225	Fertility (3)
SYD	5235	Population Mobility (3)
SYO	5335	Sociology of Political Economy (3)
SYO	5505	Theories of Organizations (3)
SYP	5446	Sociology of National Development (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)

Definition of Prefix

INR — International Relations
PAX — Peace Studies

Graduate Courses

INR 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) 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 (5) semester hours. Subject varies with each student. A maximum of three (3) 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 (9) 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 (6) semester hours of credit is required.

INR 8966r. Master's Comprehensive Examination (0).

INR 8976r. Master's Thesis Defense (0).

PAX 5105. Peace, Justice, and Conflict (3). This course is designed as an introduction to the academic field of peace studies. It begins with a discussion of traditional approaches to the problem of international war. It then turns to an analysis of the difference between "negative peace," or the absence of international war, and "positive peace," which refers not only to the absence of war, but also to the presence of social, economic, and political justice. The course concludes with a discussion of contrasting views of alternative world futures.

PAX 5305. Poverty and Inequality in the Global System (3). This course deals with the social, political, and economic issues which have polarized the world into the "have" and "have not" nations. Special attention in this course is given to the problems and perspectives of the third world: poverty, economic resources, cultural and political conditions, population growth, food, social service needs, the impact of technol-

ogy and new modes of communication, developments in educational reform, problems of social change, and the role of third world countries in world politics.

PAX 5907r. Directed Individual Study (1–3). (S/U grade only.) Prerequisite: One peace studies course. Supervised reading and research on selected topics in peace studies. May be repeated to a maximum of six (6) semester hours.

PAX 5930r. Special Topics in Peace Studies (3). Topics vary. May be repeated to a maximum of fifteen (15) semester hours.

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 Elementary and Early Childhood Education; English; Middle and Secondary Education

LATIN AMERICAN HISTORY
see History

LATIN: LANGUAGE STUDIES
see Classical Languages, Literature, and Civilization

LAW

College of Law

Professors: Abbott, Atkinson, Banoff, Christie, Crossley, D'Alemberte, Dodge, Ehrhardt, Gey, Griffith, Hirsch, Jacobs, LeBel, Markell, McHugh, Ruhl, Schroeder, Seidenfeld, Stern, Van Doren, Vinson, Weidner, Yetter; *Associate Professors:* Baldwin, Bank, Garvin, Larson, Lee, Powell, Shepherd, Southerland; *Assistant Professors*: Gore, Mitchell; *Associates in Law:* Annino, Busharis, Gertz, Krieger, Stone; *Assistant in Law:* Oh; *Visiting Assistant Professor:* Priester; *Visiting Associate in Law:* Rowe; *Visiting Assistants in Law:* Blenkhorn, Grippa, Lavia, Piar, Shelley, Wolf; *Richard W. Ervin Eminent Scholar in Law*: Warner; *Edward Ball Eminent Scholar:* Abbott; *Tobias Simon Eminent Scholar:* Teson; *Professors Emeriti:* Dickson, George, Kennedy, Morse, Oeltjen, Slagle, VanDercreek

The Florida State University College of Law provides a three-year program of study leading to the juris doctor (JD) degree, the first law degree that American law students can earn. Receipt of the juris doctor degree is a requirement for admission to any state Bar, a prerequisite for the practice of law.

The purpose of the College of Law is to prepare highly qualified graduates for positions as counselors, advocates, judges, law-oriented business persons, researchers, teachers, and philosophers of the law.

For complete details of degree requirements, plus a description of the college, its facilities, opportunities, and available financial assistance, refer to the "College of Law" chapter of this *Graduate Bulletin*.

Definition of Prefix

LAW — Law

Law Courses

LAW 5000. Contracts I (2–3). Substantive and remedial aspects of business agreements including offer, acceptance, consideration, assignments, third-party beneficiaries, statute of frauds, legality, performance, and remedies.

LAW 5001. Contracts II (2–3). Prerequisite: LAW 5000. Substantive and remedial aspects of business agreements, including offer, acceptance, consideration, assignment, third-party beneficiary, statute of frauds, legality, performance, and remedies.

LAW 5100. Criminal Law and Procedure (4). Sources of state and federal criminal law; the elements of criminal acts in general and as related to the various specific crimes; the conduct of the prosecution and defense of a criminal trial; and the Statutes of Florida on criminal procedure. Required course.

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. Required course.

LAW 5400. Property I (2–3). The institution of property in society; interests created by private arrangements or by operation of law; judicial reconciliation of competing interests; community action with respect to the use of property.

LAW 5402. Property II (2–3). Prerequisite: LAW 5400. The institution of property in society; interests created by private arrangement or by operation of law; judicial reconciliation of competing interests; community action.

LAW 5501, 5502. Constitutional Law I, II (3, 3). Judicial function in constitutional cases, federal system, powers delegated to national government powers reserved to the states, due process of law, and fundamental individual rights. Required courses.

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. Required course.

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. First-year required course.

LAW 5793. Legal Writing and Research II (2). Legal writing techniques, practical work in analyzing legal problems, preparation of an appellate brief, and the argument of an appellate case. Follows LAW 5792. Required course.

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). 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 (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 6200. Legal Process (3). Major jurisprudential concepts in solving specific legal problems; legal problems and processes involving individuals and their legal counsel, legislatures, and government officials.

LAW 6235. Women and the Law (3). Study of the legal treatment of sex differences in the construction and legitimization of the social status of women and men.

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 55015502, 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, recision, 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 6420r. 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 wildlife law. May be repeated to a maximum of five (5) semester hours.

LAW 6520. Administrative Law (3). Legislative, executive, and judicial control of administrative action; formal and informal administrative process; adequacy of notice, limitations, or restrictions on deciding body; appellate review.

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 (5) 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 (7) 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 (5) 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 (5) semester hours.

LAW 6765. Fundamental Financial Concepts (2–3). An introduction to basic accounting principles and other fundamental financial concepts, including compound interest, present value methodology, reading financial statements, valuation of a going concern, financial markets, and stock market indexes. Intended to provide basic financial literacy for law students with limited business background.

LAW 6794. Writing Skills (3). A workshop to develop and refine writing skills in legal contexts.

LAW 7036. Commercial Law Seminar (2). Prerequisites: LAW 6010, 6030, or 6035. In-depth study of selected problems in commercial law.

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 7055. Corporate Reorganization (2). Prerequisite: LAW 7050. An advanced course in the reorganization of business entities under Chapter 11 of the Bankruptcy Code. Students play the Debtor-Creditor Game, an interactive computer simulation of a financially distressed motel/bar/restaurant, in the role of counsel to the debtor and its numerous creditors, ranging from the bank to a rock band, who must develop and implement their own strategies, including the negotiation of a "workout agreement" or a plan of reorganization.

LAW 7064. Corporate Finance (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 7085. Banking Law (3). Introduction to the law of commercial banking.

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 (2). A survey of contemporary jurisprudential thought.

LAW 7215. Judicial Biography (2–3). A study of judicial biography and the relationship between the personal and professional life of a judge and his opinions and jurisprudence.

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 admentment, privacy, tort liability, and copyright.

LAW 7236. Reproductive Rights (3). Prerequisite: LAW 6235 or 7710. Advanced study of reproductive technologies and the law, especially family, contract and property law.

LAW 7237. Diversity and the Constitution (2–3). Advanced study and critique of current equal protection doctrine with respect to issues of diversity in light of interdisciplinary literature on political theory, including feminist jurisprudence, critical race theory, and gay and lesbian theory.

LAW 7245. Seminar in Law and Literature (2). (S/U grade only.) Critical analysis of the artists perception of legal institutions and personalities as reflected in enduring literary masterpieces. Students will prepare papers on selected topics.

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 EnvironmentalLaw (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 7270. Native American Law (2–3). Course covers how federal law addresses Native American tribes and those subject to their jurisdiction. It will provide an overview of federal policy towards Native Americans. It will also discuss is-

sues of the relationships of states to tribes, tribal interests in land, water, hunting, and fishing, and the individual rights of those subject to Native American tribal jurisdiction.

LAW 7285. Spanish for Lawyers (2–3). Introduction to basic legal, professional and technical vocabulary in Spanish, including reading, translating, analyzing, discussing and drafting legal material in Spanish.

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 7305. Litigation Seminar (2). Prerequisites: LAW 5300, 6330. Development of practical litigation skills in civil practice through analysis of actual and hypothetical case records; particular emphasis is placed on client and witness interviewing, fact investigation, pleading and motion practice, discovery, evaluation, and negotiation. Analysis of alternative procedures together with their potential costs and benefits in light of litigation goals. May also consider law office procedures, maintenance of litigation files and dockets, cost controls, and office management. Limited enrollment.

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 7311. Dispute Resolution Seminar (2). Advanced study of various theories regarding judicial and non-judicial mechanisms for the resolution of disputes, including both historic and comparative perspectives.

LAW 7335. Evidence Seminar (2). Prerequisite: LAW 6330. Advanced study of selected problems regarding trial evidence.

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 7365. Arbitration Practice (2). (S/U grade only.) Prerequisite: LAW 6315. A study of arbitration practice and the development of arbitration advocacy skills.

LAW 7422. Commercial Transactions (2). Prerequsites: LAW 6060 and 6600. Workshop to develop basic transactional skills in the context of commercial practice, especially real estate development.

LAW 7424. Oil and Gas Law (2). Survey of property law relating to exploration and production of oil and gas. Includes a study of state regulation, adverse possession, leaseholds and mineral fees, and obligations of lease.

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 7471. Environmental Torts (3). Advanced study of tort law and theory applicable to toxic and other environmental torts with emphasis on litigation practice.

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 statues enacted to remedy violations of federal constitutional rights. The principal Reconstruction Era Statues, 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 (5) 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 7515r. Disability Law (2–3). A study of the law of disability discrimination litigation with an emphasis on federal laws affecting civil rights in employment, education, housing, and accommodations. May be repeated to a maximum of five (5) semester hours.

LAW 7521. Florida Administrative Practice (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 7552. Economic Regulations of Business (2–3). Advanced study of economic market failures and regulatory approaches. Students will analyze a particular regulatory scheme, evaluate its efficacy and wisdom, and suggest an alternative.

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 (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 (5) 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 (5) 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 (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 7723. Genetics, Ethics, Law, and Policy (2–3). Advanced study of the ethical, legal, and public policy implications of current and future research and knowledge in human genetics. Topics include privacy and confidentiality of genetic information, insurance and employment discrimination on the basis of genetics, prenatal testing and abortion, cloning, gene therapy and enhancement, and eugenics.

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 7910r. Directed Individual Study (1–5). (S/U grade only.) Independent research culminating in a quality paper written under supervision of a faculty member. Upper-class students only; consent of instructor.

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 (4) semester hours.

LAW 7930r. College of Law Special Topics (1–5). Consideration of special legal areas not included elsewhere in the curriculum. Credit is, and enrollment may be, determined by the instructor. May be repeated when content changes. Different sections may be taken in the same semester; consent of instructor.

LAW 7940r. Clinical Orientation (1–2). (S/U grade only.) Introduction to the College of Law Clinical Programs, appellate brief writing, trial and appellate proceedings, and a review of applicable Florida practice and procedure. Consent of instructor.

LAW 7945r. Practicum (1). (S/U grade only.) Corequisites: LAW (various). Practicum offered in conjunction with another course using role-playing and simulations to develop legal drafting skills and interviewing, negotiating, and persuasive skills. May be repeated in conjunction with a different course up to a total of four (4) semester hours.

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 upperclass 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. All programs are graded S/U. These programs combine practical experience with scholarship and research. May be repeated to a maximum of thirty (30) semester hours.

LAW 7950r. Law Review (1–5). (S/U grade only.) Participation on the law review. Selection determined by directing professor. Upperclass students only. May be repeated to a maximum of twelve (12) 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.

LEARNING AND COGNITION
see Educational Psychology and Learning Systems

Interdepartmental LINGUISTICS MINOR

Curriculum Committee: James Mitchell, Joe Ree, and Shonna Trinch (Modern Languages and Linguistics)

Students (both undergraduate and graduate) who wish to minor in linguistics should choose a minor adviser from the members of the linguistics curriculum committee (listed above) who will help them in designing courses of study that fill their personal and professional needs.

Requirements for a Minor

Graduate students in linguistics must take at least fifteen (15) 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*.

Core Courses

LIN 5035 or 5045, 5510,

Other Courses

LIN 5772, 5908r, 5932; PSY 5916r; SPN 5805

LINGUISTICS
see also Anthropology; Communication Disorders; English; Modern Languages and Linguistics

LITERATURE
see English; Modern Languages and Literature

Department of MANAGEMENT

College of Business

Chair: Dan Voich, Jr.; *Professors:* Anthony, Ferris, Fiorito, Hoffman, Kacmar, Lamont, Martinko, Perrewé, Stepina, Voich, Wilkens; *Associate Professors:* Ketchen, Kuhn, Matherly; *Assistant Professors:* Combs, Douglas, Hochwarter; *Assistants:* O'Connor, Ryals, Simmons, Trammell; *Francis Eppes Professor of Management:* Ferris; *J. Frank Dame Professor of Management:* Fiorito; *Charles A. Rovetta Professor of Management:* Kacmar

The management department has a diversified faculty with a wide field of teaching and research specialties at the graduate level. These research areas include strategic management, organization behavior and theory, international and comparative management, diversification theory, learned helplessness, 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.

Master's Degree

The Department of Management hosts a master's of science in management degree program with majors available in three distinctly different areas: hospitality and tourism, management information systems, and risk management and insurance.

The major in hospitality and tourism requires completion of thirty-six (36) semester hours. The major accepts new students each semester. All application materials should be received by June 1st for Fall entry; October 1st for Spring; or March 1st for Summer.

The management information systems major requires completion of thirty-two (32) semester hours and begins only in the Fall term. It is primarily a full-time program; however, students may attend on a part-time basis under certain circumstances. Deadline for receipt of **all** application materials is June 1st.

The risk and insurance major is a corporate program designed for insurance professionals and requires completion of thirty-three (33) semester hours of graduate level coursework. It is offered on a distance-learning basis to allow the working professional to obtain the degree.

Doctoral Degree

The college offers a PhD in business administration. The management department offers two concentrations: organization behavior and human resource management, and strategic management. The majors prepare students for teaching and research at the university level. A small number of graduates, however, do obtain jobs with consulting organizations or in business.

Graduates have been placed at universities throughout the United States, including Florida International University, University of South Florida, Penn State University, University of Georgia, California State University at Fullerton, New Mexico State University, Appalachian State University, Old Dominion University, University of North Carolina at Charlotte, Georgia Southern University, and Michigan State University.

Definition of Prefix

HFT — Hospitality, Food and Tourism
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.

HFT 5226. Leadership Strategies in Hospitality and Tourism Organizations (3). Students study many human behavior principles important to professional and personal success. These principles include the following: self-development, leadership, traits, values, time management, goal setting, interdependence, relationships, continuing improvement, as well as other principles.

HFT 5245. Managing Service Organizations (3). This course explores current issues in establishing outstanding service organizations in the hospitality and tourism industry.

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.

HFT 5935r. Special Topics in Hospitality and Tourism (3). Subjects in this course will vary based upon current trends in business as related to hospitality and tourism and may include convention services management, facilities management, vacation ownership marketing and operations, event management, and sustainable tourism management. May be repeated to a maximum of nine (9) semester hours.

MAN 5204. Organization Theory (3). An examination of basic managerial concepts of organization theory, including the role of an organization, environment, formal structure, and related concepts.

MAN 5245. Organizational Behavior (3). A dynamic examination of managerial concepts of human behavior in work organizations.

MAN 5285. Organizational Change and Development (3). Prerequisite: MAN 5245. Concepts of managing and developing the organization and its members during periods of transition, change, and conflict resolution.

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 5651. International Management Strategy (3). An advanced look at the various strategies organizations can adopt in operating in an international environment. Explores the cultural, human resources, physical resources, legal and financial environments of international strategy formulation and implementation.

MAN 5721. Strategy and Business Policy (3). Prerequisite: All other master of business administration core courses. The relation between theories and practices of management; utilizing theories in strategic decision making and including a methodology 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 masters candidates only. A maximum of three (3) hours may apply towards the masters degree. May be repeated to a maximum of five (5) 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 (3) 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 (5) semester hours.

MAN 5971r. Thesis (3–6). A minimum of six (6) semester hours is required.

MAN 8966r. Master's Comprehensive Examination (0).

MAN 8976r. Master's Thesis Defense (0).

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.

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 (10) 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 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 (5) semester hours.

MAN 6932. Doctoral Seminar in Strategic Management I: Literature (3). Study of organizational strategies and polices 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 (5) 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 (24) semester hours is required.

MAN 8964r. Doctoral Preliminary Examination (0).

MAN 8985r. Dissertation Defense Examination (0).

MANAGEMENT
see also *General Bulletin*; Management Information Systems; Sport Management, Recreation Management and Physical Education

MARINE BIOLOGY
see Biological Science

Department of MANAGEMENT INFORMATION SYSTEMS

College of Business

Chair: David B. Paradice; *Professors:* George, Mason, Paradice, Stair; *Associate Professor:* Kacmar; *Assistant Professors:* Bush, Chudoba, Dickey, Gallagher, Karahanna, Wasko; *Assistants:* Fisher, Payne, Wells; *Visiting Assistant:* Paul; *Thomas L. Williams, Jr., Eminent Scholar*: George; *Sprint/United Telephone of Florida Professor*: Mason

The Department of Management Information Systems is the youngest department in the College of Business. It was formed to increase the emphasis on technological education in the business curriculum. The purpose of the MIS master's program is to educate future systems analysts and information technology specialists. Students take courses in systems development basics, such as analysis and design, database, and telecommunications, as well as courses focusing on project management and leading edge technologies. The MIS curriculum provides the student with a broad understanding of the role and use of information technology in the various functional areas of modern organizations. At the doctoral level, the purpose of the curriculum is to create university professors skilled in the art and science of research and teaching.

The College of Business offers a doctor of philosophy (PhD) program in business administration. Students concentrating in management information systems are highly qualified individuals primarily seeking university teaching careers. Graduates are placed in other highly recognized university faculties. In management information systems, the student concentrates on the research issues in the management of technology in organizations and in the development and use of information in decision making and control.

The **Center for Information Systems Research** is a major unit within the department. Its purpose is to support high-level research into the nature and use of information in organizations and to enhance the management of information resources in all sectors of society. Through projects supported by the center, students have the opportunity to expand their knowledge of specialized technology, problems, and research issues not covered in the regular curriculum. The center is supported by a variety of public and private organizations and by private individual contributions.

Requirements

A student in the Master of Science in Management program, with a major in management information systems, must complete thirty-two (32) semester hours. The program begins only in the Fall term. It is primarily a full-time program; however, students may attend on a part-time basis under certain circumstances. Deadline for receipt of **all** application materials is May 1st.

With approval on an individual basis, the MBA student may take specific electives in MIS which are offered periodically.

The PhD student pursues a broad-based curriculum in information and management sciences. A series of doctoral seminars form the core of the program. The seminars deal with research methodology, general systems theory, individual and organizational decision-making processes and structure, management information systems, and systems analysis methodology. A series of methodology and quantitative analysis courses are completed as a part of the major or as a part of the college-required tools and requirements sequence. Students must select a minor to support their research interests. A variety of topics from other departments both within and outside of the College of Business are available. Psychology, sociology, statistics, mathematics, philosophy of science, computer science, strategic management, organizational behavior, and communication are examples of support areas that have been selected.

Definition of Prefixes

ISM — Information and Management Sciences

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.

ISM 5006. Communication and Decision Processes (3). The communication and decision behaviors that are critical for effective individual, group, and organizational performance are examined. The objectives and constraints associated with the behaviors are studied, as are strategies for managing them. The use of information technology to manage the behaviors is a special focus.

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 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 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 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 5475. Client/Server Applications (3). Students will gain a basic understanding of client/server architecture and learn to develop client/server solutions to business problems. The course will cover client/server components, development methodologies, and tools. Students also will develop a prototype system.

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). Indepth study of current topics in information and management sciences. May be repeated to a maximum of three (3) times as topics vary.

ISM 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours of credit is required.

ISM 8966. Master's Comprehensive Examination (0). (S/U grade only.)

ISM 8976. Master's Thesis Defense (0). (S/U 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 (5) 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 (5) 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 (24) semester hours is required.

ISM 8964. Doctoral Preliminary Examination (0). (S/U grade only.)

ISM 8985. Dissertation Defense Examination (0).

Department of MARKETING

College of Business

Chair: Dennis Cradit; *Professors:* Cradit, Cronin, Downs, Flynn, Giunipero, Goldsmith, Hofacker, Showalter, Stith, Zenz; *Associate Professors:* Brusco, Freiden; *Assistant Professors:* Hartline, Knight, Overby, Raman; *Lecturer:* Brennan; *Richard M. Baker Professor of Marketing:* Goldsmith

The marketing department faculty teaches a variety of courses at the graduate level. Additionally, the faculty research efforts cover a large spectrum of topics that include brand equity, consumer behavior, global marketing, marketing research, marketing services, mathematical modeling, purchasing management, retailing, and value systems. The major focus of the graduate level instruction is to stimulate student's interests and increase knowledge in the marketing discipline. At the master's level, the department attempts to blend the academic theory with practical knowledge in order to bridge the gap between the professional job environment and theory.

In the doctoral program the department's primary objective is to build a theoretical-based program that allows students to develop a qualitative and quantitative appreciation for marketing. The department attempts to prepare doctor of philosophy (PhD) students for academic teaching and research-based careers. The curriculum introduces students to topics in marketing, management, consumer behavior, research methodology, and quantitative methods. Students in past years have specialized in areas such as marketing strategy, service marketing, channels and distribution, promotion, product design, consumer behavior, and quantitative methods.

Requirements

Required marketing course work at the master of business administration (MBA) level consists of the following courses: MAN 5601, Multinational Business Operations, and MAR 5816, Marketing Strategy.

At the doctoral level, candidates with a concentration in the marketing area are required to complete nine (9) doctoral-level marketing seminars, a doctoral-level program of study in a secondary support area, and four (4) additional courses in statistics. The seminars cover topics in research methods, consumer behavior, services marketing, buyer behavior, marketing strategy, marketing models, marketing systems, and marketing history.

Definition of Prefixes

GEB — General Business
MAN — Management
MAR — Marketing
QMB — Quantitative Methods in Business

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 5125. Seminar in Small Business Analysis and Assistance (3). Small business fundamentals, entrepreneurship, and consulting procedures. Students must be accepted in the Small Business Institute to participate in this seminar.

GEB 5446. The Business Context (3). Corequisite: ACG 5005 or equivalent. MBA Foundation Course. This course will consist of half a term of marketing management and half a term of financial management. The marketing management segment provides a comprehensive overview of marketing systems and major marketing management decision areas, with an emphasis on factors influencing managerial decisions. The financial management segment provides an introduction to the terminology, methodology and basic decision models of finance, with an emphasis on working capital management, capital budgeting, capital structure, and the dividend decision.

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 5525. Quality Management (3). Prerequisite: MAN 5501. The issues and techniques of quality management are covered. The focus is developing skills necessary to develop and manage quality strategies that improve organizational productivity and performance.

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 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 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 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 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 5815. Marketing Management (3). Comprehensive overview of marketing system and major marketing management decision areas. Emphasis on factors influencing managerial decisions.

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 5907r. 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 (9) semester hours.

MAR 5908r. Special Studies in Management (1–3). Prerequisite: Consent of associate dean for academic studies. May be repeated to a maximum of nine (9) semester hours.

MAR 5917r. Supervised Research (1–3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. For masters candidates only. A maximum of three (3) hours may apply towards the masters degree. May be repeated to a maximum of five (5) 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 (3) times as topics vary.

MAR 5940r. Supervised Teaching (1–3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. A maximum of three (3) semester hours may apply towards the masters degree. May be repeated to a maximum of five (5) semester hours.

MAR 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

MAR 8966r. Master's Comprehensive Examination (0).

MAR 8976r. Master's Thesis Defense (0).

QMB 5355. Quantitative Methods for Managerial Decisions (3). Prerequisites: One course in statistics and one course in calculus. Sampling techniques in design of experiments and topics in operations research. The role of quantitative methods in management problem solving.

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 5845. Simulation of Dynamic Systems (3). Prerequisite: QMB 5355. In-depth study of computer simulation methodology, including model construction, random variate generation, validation, and simulation languages as they relate to business and management.

QMB 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.

QMB 5907r. Special Studies in Management (1–3). Prerequisite: Consent of 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 (9) semester hours when topics change.

Doctoral

Note: the doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases master's candidates may elect 6000 level courses with permission of the instructor and the associate dean for academic programs.

GEB 6904r. Readings for Examination (1–12). (S/U grade only.) Prerequisite: All course work required for the PhD. Designed for PhD students who have completed all of their required course work and are preparing to sit for their preliminary examinations in the current semester. May be repeated to a maximum of twenty-four (24) 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 6507. Quantitative Methods I: Measurement, Scaling, and Choice (3). Prerequisite: Consent of instructor. Covers such topics as psychographics, scaling, conjoint measurement, multidimensional scaling, brand switching models, and logit and probit regression. Students will develop an understanding of these measurement techniques and apply these models using empirical data.

MAR 6575. Seminar in Marketing: Selected Topics in Consumer Behavior (3). Prerequisite: Consent of instructor. In-depth analysis of current selected topics in consumer information processing, attitudes, decision making, and social and cultural influences on consumer behavior.

MAR 6658. Quantitative Methods II: Psychometric and Econometric Approaches to Marketing (3). Prerequisites: MAR 6979, STA 5206, STA 5207, STA 5707; or consent of instructor. 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: Consent of instructor. 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 consent of instructor are required for admission.

MAR 6817. Seminar in Marketing Management (3). Prerequisite: Consent of instructor. 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 consent of instructor are required for admission.

MAR 6828. Seminar in Marketing: Elements and Integration of Marketing Strategy (3). Analysis of constraints and options when managing the major elements of marketing strategy, as well as optimizing opportunities, goals, and efficiency.

MAR 6918r. Supervised Research (1–3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five (5) semester hours.

MAR 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 (5) semester hours.

MAR 6979. Seminar in Marketing: Research Methodology (3). Prerequisite: Consent of instructor. 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 (24) semester hours is required.

MAR 8964r. Doctoral Preliminary Examination (0).

MAR 8985r. Dissertation Defense Examination (0).

Interdivisional Program in MARRIAGE AND FAMILY

College of Human Sciences

Program Director: Mary Hicks; *Training Director*: Mary Hicks; *Student Representative*: Jennifer Dunn; *Professors*: Bardill, Cornille, Darling, Figley, Hicks, Mills, A. Mullis, R.. Mullis, Readdick, Rehm.

Marriage and Family Therapy is a discipline for people with backgrounds in family studies, psychology, social work, counseling, and other areas who want to learn more about theory, research and clinical training with families, couples, and individuals from a relational or systems perspective. The Interdivisional Program in Marriage and Family at The Florida State University, in the Department of Family and Child Sciences, College of Human Sciences, is one of the most distinguished in the nation, attracting students from across the country and around the world. It is one of the oldest doctoral programs continuously accredited by the Commission on Accreditation for Marriage and Family Therapy Education (COAMFTE) of the American Association for Marriage and Family Therapy (AAMFT).

Requirements

To apply to the PhD Program in Marriage and Family, contact Ms. Lynn LaCombe, *225 Sandels Building, College of Human Sciences, Florida State University, Tallahassee, Fl 32306-1491;(850) 644 3217*. Email: *llacomb@mailer.fsu.edu.*

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 combined Graduate Record Examination (GRE) scores of at least 1000 for the verbal and quantitative sections 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 statement of professional ethics and conduct, and provide a minimum of three (3) letters of recommendation from references who can assess their scholarly and clinical potential. Fully completed applications must arrive by January 15th to be considered for the fall term. The most qualified candidates will be invited to attend a day-long interview with the MFT clinical faculty in late February or early March. 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.

Course Work

Program requirements for students who already have a master's degree in marriage and family therapy (MFT) from an accredited program include a total of fifty-six (56) semester hours of course work plus twenty-four (24) semester hours for dissertation; fifteen (15) semester hours in the doctoral sequence; at least one semester practicum experience (this requirement involves earning 200 direct client contact hours and passing Level V or VI with a grade of "A"); fifteen to eighteen (15–18) semester hours of research requirements and twelve (12) semester hours of electives required for the major area of study course work may include the hours of practicum taken by the student. The three (3) semester hours of practicum taken at Level V or VI, however, cannot be included as part of the twelve (12) elective semester hours.

The sequence of courses generally takes two years, including Summer semesters. Full time attendance is required. Students who do not have a master's degree in marriage and family therapy will have to complete additional coursework to meet the standard curriculum requirements of COAMFTE. All students will complete a nine (9) or twelve (12) month internship and at the time of graduation would have documented at least 1000 direct client contact hours with appropriate supervision in their clinical training record.

The MFT Faculty emphasize evidence-based therapies. Feminist, minority, and gay, lesbian and bi-sexual issues are included and students are also encouraged to explore new ideas.

Clinical Training

Students are required to be in clinical training beginning from the first semester until their graduation. In recent years, student therapists at the center have worked with a variety of clients from a broad spectrum of socio-economic and ethnic background. Presenting problems have included divorce and relational conflict, sexual and physical abuse, domestic violence, child custody disputes, alcohol and substance abuse, self esteem issues, phobias, parenting and juvenile behavior issues, blended families, school stress, marital and premarital issues, and court ordered therapy.

Supervision

The clinical faculty in accordance with COAMFTE guidelines conducts supervision. Supervision has ranged across reflecting teams, in-the-room supervision, traditional live and videotaped, group and individual supervision. At least one hour of supervision is provided for five hours of client contact on a weekly basis for all registered practicum students.

Research

Students and faculty have collaborated in a wide range of clinical and theoretical research projects and articles, from traditional quantitative studies to qualitative studies.

This information covers only a small part of the Interdivisional Programs Policies and Procedures. For additional information, please contact the Interdivisional Program Office, at *(850) 644-1588*.

MASS MEDIA COMMUNICATIONS
see Communication

Department of MATHEMATICS

College of Arts and Sciences

Chair: DeWitt Sumners; *Associate Chair*: Bowers; *Associate Chair for Graduate Studies:* Huckaba; *Director of Basic Mathematics:* Stiles; *Director of Applied Mathematics:* Kopriva; *Director of Financial and Actuarial Mathematics:* Case; *Professors*: Aluffi, Bellenot, Bowers, Bryant, Case, Erlebacher, Gilmer, Gunzberger, Heil, Huckaba, Hunter, Hussaini, Klassen, Kopriva, Mesterton-Gibbons, Mott, Navon, Nichols, Oberlin, Peterson, Quine, Seppala, Sumners, Tam, Wright, Young; *Associate Professors:* Blumsack, Fenley, Hironaka, Kercheval, Magnan, Mio, Nolder, van Hoeij, Wang; *Assistant Professors*: Aldovandi, Bertram; *Visiting Assistant Professors:* Hurdal, Sussman; *Service Professor:* Novinger; *Associates in Mathematics:* Blackwelder, Boyd, Burgess, Dodaro, Grigorian, Wooland; *Assistants in Mathematics:* Kirby, Rogers; *Professors Emeriti:* Heerema, Howard, Kreimer, McWilliams; *Courtesy Professors:* Banks, Beaumont, Chen, Gallivan, Lacher, Levitz, Lin, Loper, Mascagni

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 doctor of philosophy (PhD) degrees. Its programs are designed to prepare students for mathematical careers in the academic, financial, and industrial sectors. PhD and master's degrees are offered with concentrations in pure, biomedical, computational, financial, and applied mathematics. Financial Mathematics students may broaden their opportunities with a concentration in actuarial science. Flexible master's programs may be designed for career goals of individual students. Programs supporting industrial mathematics and two-year college teaching are under consideration.

The faculty are active in research spanning the fields of pure mathematics (algebra, analysis, geometry, topology), applied mathematics (high performance computing, fluid dynamics, aeroacoustics, galactic dynamics), and biomedical mathematics (computational biology, evolutionary game theory, protein geometry, knotting of DNA, conformal mapping of anatomical regions). The department has strong cooperative relationships with science and engineering departments and institutes on campus, including the National High Magnetic Field Laboratory, the interdisciplinary program in Computational Science and Information Technology (CSIT), the Geophysical Fluid Dynamics Institute, and the Institute for Molecular Biophysics. The faculty working in biomedical mathematics look forward to developing a close relationship with the newly established College of Medicine.

The faculty of the department includes a Francis Eppes Professor, three Robert O. Lawton Distinguished Professors (a one-per-year academic honor bestowed by the University), an Eminent Scholar Chair in High Performance Computing, a McKenzie professor, three Distinguished Research Professors, two recipients of Developing Scholar Awards, and more than a dozen recipients of University Teaching and Advising Awards.

Aside from an eclectic array of beginning and advanced courses in graduate mathematics, students may take advantage of approved courses in other disciplines that complement the program of study. This includes coursework in biochemistry, computer science, economics, engineering, finance, molecular biology and biophysics, physics, risk management, and statistics. There is an active seminar and colloquim series; advanced seminars (graduate students with faculty) include biomedical mathematics, high performance computing, aeroacoustics, algebraic cryptography, algebraic geometry, geometric group theory, mathematical biophysics, quantum computing, Riemann surfaces, and symbolic computation. The graduate students run their own seminar in which students have an opportunity to share with colleagues their mathematical research or interests.

For all students, the University provides internet access, course webpages and communications, and access to a number of leading databases including the *Mathematical Review.* The department operates its own network of computers and computer labs, including a graduate computer lab with high-speed optical internet connections. Faculty and students in the department have access to a variety of mathematical software which is used in courses and in research. For additional information, see the departmental website and links at *http://www.math.fsu.edu.*

Graduate Requirements

Please review all University-and college-wide degree requirements summarized in the appropriate chapter of this *Graduate Bulletin*.

The student should obtain from the departmental website and office possible revisions since this publication to the degree guidelines and course information listed below.

A student who proposes to do graduate work in the department is required to report scores from the aptitude test of the Graduate Record Examinations (GRE) taken within the last five years.

Graduate students in mathematics are strongly encouraged to perform some teaching as part of their professional development; teaching experience is seen by many prospective employers as a positive indicator of success. A student expecting to teach in a two-year college should have at least the equivalent of a master's degree. Before application for a position in a four-year college, it is recommended that the PhD be completed. A number of graduate students receive support from fellowships, or as teaching or research assistants.

Master's Degree

A program for the master's degree is planned in conference with an adviser appointed by the chair of the department. It may be either a course-type program, consisting of thirty-two (32) or more semester hours of graduate courses, or a thesis-type program, consisting of thirty (30) or more semester hours of graduate courses including a minimum of six (6) semester hours in MAT 5971r for the writing of an acceptable thesis. Credit in MAT 5971r cannot be counted toward a course-type program.

In option (A) or (B) of the following text, a program of either type will include at least twenty-two (22) semester hours in courses offered by the

department. The courses MAT 5911r, MAT 5920, and MAT 5941, MAT 5946r are not applicable toward required hours of any program, and MAT 5907r may be counted in a program only with departmental permission. No 4000-level course in this department may count toward the master's degree. The student will select one of the following options (except that a student who has successfully completed MAT 8964 will be deemed to have qualified for a master's degree, subject to University regulations).

A. **Mathematics.** Under this option the courses MAA 5406, 5616; MAS 5307–5308; MHF 5206; MTG 5326–5327; and either MAA 5407 or 5617 or MAD 5420 or 5708 or MAP 5207 must be included if these courses or their equivalents have not already been taken. The course STA 5326 may be counted toward the required twenty-two (22) hours in the department by a student following this option. Students are urged to include courses in one or both of applied mathematics and computer science, and students planning to do further graduate work should take into account the requirements for the doctorate.

B. **Applied Mathematics.** Under this option the students program will include the courses MAA 5306–5307; MAD 5708, 5738; MAP 5207 or MAD 5420; MAP 5345–5346, 5423; and either MAP 5431 or a course of equivalent level in another area of application, if these courses or their equivalents have not already been taken.

C. **Directed Program of Study**. This is a flexible option designed to permit the student to combine course work in several areas while achieving depth in some area. A committee of three faculty members will supervise and must approve the selection of courses for the program of study. A student wishing to pursue this option should notify the department early, preferably in the first semester of graduate study.

D. **Computational Mathematics**. Under this option the student will choose three of the courses MAP 5345, 5346, 5423, 5441, 5217 (MAP 5345 and 5346 are required unless already taken); two of the courses MAP 5431, 5512, 5513, OCP 5253, 5271, PHY 4323, 4324, 5346 (or courses of equivalent level in another area of application); and four of the courses MAD 5420, 5708, 5738, 5739, 5745.

E. **Financial Mathematics**. This interdisciplinary option prepares students for work in financial institutions and markets. The departments participating with mathematics are computer science, economics, finance, risk management, and statistics. A student's program (subject to the specialized requirement guidelines) reflects individually appropriate choices from those departments. A steering committee of faculty representing those departments advises timely modifications to the requirements for this minimum thirty-six [36] semester hour degree. A minor concentration in actuarial science may be selected within the degree requirements.

F. **Biomedical Mathematics.** In this option, students develop a mix of biological, mathematical, statistical, and computational skills. Studies in the interdisciplinary program include specialized mathematics courses and supporting courses from the participating departments of statistics, biological science, chemistry, and computer science as well as the Institute of Molecular Biophysics. As a result of the combined thirty-six (36) semester hours of required coursework, workshops, and corollary activities, students graduate prepared to work in bioinformatics or mathematical applications to genomics, biomedical, or biophysical research. After completing this master's degree, students may choose to pursue doctoral dissertation research with faculty who are actively involved in collaborations with medical and bench scientists.

A master's degree student under any option will have a supervisory committee appointed by the chair of the department and consisting of at least three graduate faculty members, of whom at least two (one in options[E] or [F]) must be members of the department. If taking a course-type program in options (A)-(D), the student will be required to pass a master's comprehensive examination including both written and oral parts, although the student's committee may waive the oral part. If taking a thesis-type program, the student will be required to pass a master's thesis defense but not a master's comprehensive examination.

Doctoral Degree

The PhD in mathematics indicates knowledge of mathematics and a demonstrated capacity to do original, independent scholarly investigation. To receive the doctoral degree, the student must complete the requisite courses in an area of study, satisfy the requirements for doctoral candidacy, have the agreement of a major professor or co-director within the department to direct the doctoral research in that area, be admitted to candidacy through the graduate school, and write and defend a dissertation of original and independent research.

Studies leading to the PhD are available in several areas of research in both pure and applied mathematics as well as several interdisciplinary areas, such as biomedical mathematics and financial mathematics. Each area of study specifies its own course and PhD preliminary examination and candidacy requirements. A current list of areas of study with their requirements is available on the departmental website as well as through the departmental office.

The course requirements for each area of study are chosen to provide the student with a strong basis for research. Standard foundational material that offers breadth is covered in the 5000-level courses offered in the department, and more advanced material that offers depth is covered in topics courses and seminars. The area of study may include appropriate courses 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. After admission to doctoral candidacy, registration and participation in the appropriate seminar is required.

A doctoral student in mathematics must demonstrate proficiency in a minor area of study; normally this is accomplished by completing six (6) or more semester hours in an approved mathematics related minor with a grade point average (GPA) of at least 3.0. The specific requirements of the minor may vary; students should consult the requirements of their area for details. If the minor area is in mathematics itself, these hours must be outside the list of courses required for the doctoral preliminary examination in the student's area. At the discretion of the student's doctoral 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. From the time of passing the doctoral preliminary examination until receipt of the doctorate, students are required to enroll in an appropriate advanced seminar (numbered 6939) in each semester of residence in which the seminar is offered; this seminar enrollment must include at least three semesters.

After students are admitted to doctoral candidacy, the writing of a dissertation becomes their major concern, although further course work and participation in seminars are usually required. The defense of dissertation must be held within five years after completion of the doctoral preliminary examination; if this time limit is not met, the student may be required to repeat the examination.

Definition of Prefixes

MAA	—	Mathematics: Analysis
MAD	—	Mathematics: Discrete
MAP	—	Mathematics: Applied
MAS	—	Mathematics: Algebraic Structures
MAT	—	Mathematics
MHF	—	Mathematics: History/Foundations
MTG	—	Mathematics: Topology and Geometry
OCP	—	Oceanography: Physical

Undergraduate Courses

MAA	4227	Advanced Calculus II (3)
MAA	4402	Complex Variables (3)
MAC	2312, 2313	Calculus with Analytic Geometry II, III (4, 5)
MAD	3703	Numerical Analysis I (3)
MAP	2302	Ordinary Differential Equations (3)
MAP	3305, 3306	Engineering Mathematics I, II (3,3)
MAP	4153	Vector Calculus with Introduction to Tensors (3)

MAP	4170	Introduction to Actuarial Mathematics (4)
MAP	4341, 4342	Elementary Partial Differential Equations I, II (3, 3)
MAS	3105	Applied Linear Algebra I (4)
MAS	4302, 4303	Introduction to Abstract Algebra I, II (3, 3)
PHY	2048C	General Physics [for Physical Sciences] (5)
STA	4322	Mathematical Statistics (3)
STA	4442	Introductory Probability I (3)

(Please refer to the *General Bulletin* for full course descriptions.)

Graduate Courses

Note: prerequisites are stated by number from the above list of FSU courses. The equivalent course at another institution or consent of the instructor is sufficient.

MAA 5306, 5307. Advanced Calculus I, II (3, 3). Prerequisites: MAC 2313; MAS 3105; MGF 3301. Functions, sequences, limits, continuity, uniform continuity; differentiation; integration; convergence, uniform convergence.

MAA 5406, 5407. Theory of Functions of a Complex Variable I, II (3, 3). Prerequisite: Graduate standing. 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 5616, 5617. Measure and Integration I, II (3, 3). Prerequisite: MAA 4227 or 5307. Lebesgue measure and integration; Banach spaces of integrable functions; abstract measure and integration.

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.

MAD 5305. Graph Theory (3). Prerequisite: Graduate standing. 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 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 5708. Numerical Analysis II (3). Prerequisites: MAD 3703; MAP 2302. Approximation theory, numerical solution of nonlinear systems, boundary value problems, and initial value problems for ordinary differential equations.

MAD 5738, 5739. Numerical Solution of Partial Differential Equations I, II (3, 3). Prerequisites: MAD 5708; MAP 4342 or 5346. Finite difference methods for parabolic, elliptic, and hyperbolic problems; consistency, convergence, stability.

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. Psuedospectral 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.

MAP 5107. Mathematical Modeling (3). Prerequisites: MAD 5708; 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 5177. Actuarial Models (3). Prerequisites: MAP 4170; STA 4322. Survival models; life probabilities; tables, mortality laws; contingent payment models; life annuities; premium principles and net premium reserves for continuous, discrete and semi-continuous life insurances, multiple life models, multiple decrement theory (theory of competing risks) and applications to pension plans, pricing and nonforfeiture models.

MAP 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 4341 or 5345. 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: MAP 2302; MAP 4341; MAS 3105; C, 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 3048C. 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 5482. Mathematical Bioeconomics (3). Prerequisites: MAC 2313; MAP 2302, 3305 or 3306; MAS 3105; STA 4442. Biological and economic dynamics of renewable resource management. Optimal control theory. Theory of resource regulation. Growth and aging. Multispecies models. Stochastic models.

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 5512. Hydrodynamic Stability (3). Prerequisite: MAP 5431. Stability of nearly parallel flows; propagation characteristics of instability waves; effects of rotation, thermal, and density stratification on hydrodynamic stability; computation 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, 3305 or 3306; MAS 3105; STA 4442. 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.

MAS 5307, 5308. Groups, Rings, and Vector Spaces I, II (3, 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 5311, 5312. Abstract Algebra I, II (3, 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 5331r, 5332r. Algebraic Structures I, II (3, 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 (6) semester hours.

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.

MAT 5907r. Directed Individual Study (1–4). (S/U grade only.) May be repeated to a maximum of eighteen (18) 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 (5) 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 (18) semester hours.

MAT 5932r. Selected Topics in Mathematics (1–3). May be repeated to a maximum of twelve (12) 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 (12) 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 approval. Supervised internship individually arranged to accommodate professional development in an area of application. May be repeated to a maximum of three (3) semester hours.

MAT 5946r. Supervised Teaching (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

MAT 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours credit is required for a thesis plan.

MHF 5206. Foundations of Mathematics (3). Zermelo-Fraenkel axioms for set theory. Finite and infinite sets. Ordinal numbers, cardinal numbers. The axiom of choice and some of its equivalents.

MHF 5306. Mathematical Logic I (3). Prerequisite: MAS 4302. Propositional and predicate logic, models. Godels completeness theorem and related theorems. Applications to modern algebra. Non-standard analysis.

MHF 5307. Mathematical Logic II (3). Prerequisite: MHF 4302 or 5306. Primitive recursive and recursive functions. Formal number theory. Godels incompleteness theorem. Tarskis theorem. Undecidability of the predicate calculus.

MTG 5326, 5327. Topology I, II (3, 3). Prerequisite: Graduate standing. Fundamental group and covering spaces, simplicial and CW complexes, elementary homotopy theory, elementary homology theory.

MTG 5346, 5347. Algebraic Topology I, II (3, 3). Prerequisite: MTG 5327. Singular homology and cohomology, orientation of manifolds, cup and cap products, Poincare and Lefschetz duality, 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 (6) semester hours.

OCP 5253. Fluid Dynamics: Geophysical Applications (3). Prerequisites: MAP 5431, 5346; or consent of instructor. Shallow water theory, Poincare, Kelvin, and Rossby waves; boundary layer theory; wind-driven ocean circulation models; quasigeostrophic motion on a sphere, thermocline problem; stability theories. Also offered by the departments of Oceanography and Meteorology.

MAA 6416r. Advanced Topics in Analysis (3). May be repeated to a maximum of twelve (12) semester hours.

MAA 6526r. Advanced Topics in Functional Analysis (3). May be repeated to a maximum of twelve (12) semester hours.

MAA 6939r. Advanced Seminar in Analysis (1). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

MAD 6408r. Advanced Topics in Numerical Analysis (3). May be repeated to a maximum of twelve (12) semester hours.

MAD 6939r. Advanced Seminar in Scientific Computing (1). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

MAP 6434r. Advanced Topics in Hydrodynamics (3). May be repeated to a maximum of eighteen (18) semester hours.

MAP 6437r. Advanced Topics in Applied Mathematics (3). May be repeated to a maximum of twelve (12) semester hours.

MAP 6939r. Advanced Seminar in Applied Mathematics (1). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

MAS 6396r, 6397r. Advanced Topics in Algebra I, II (3, 3). Each course may be repeated to a maximum of six (6) semester hours.

MAS 6939r. Advanced Seminar in Algebra (1). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

MAT 6908r. Directed Individual Study (1–4). (S/U grade only.) May be repeated to a maximum of twelve (12) 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 (12) semester hours.

MAT 6980r. Dissertation (1–12). (S/U grade only.)

MTG 6396r. Advanced Topics in Topology (3). May be repeated to a maximum of twelve (12) semester hours.

MTG 6939r. Advanced Seminar in Topology (1). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

MAT 8964. Doctoral Preliminary Examination (0).

MAT 8966. Masters Comprehensive Examination (0).

MAT 8976. Masters Thesis Defense (0).

MAT 8985r. Defense of Dissertation (0).

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

Chair: Chiang Shih; *Associate Chairs:* Buzyna, Collins, Hruda; *Professors:* Buzyna, Chandra, Chen, Collins, Garmestani, Gielisse, Krothapalli, Lourenco, Schwartz, Shih, Van Dommelen, Van Sciver; *Associate Professors:* Alvi, Hollis, Hruda, Kalu, Luongo; *Assistant Professors:* Cartes, Foreman; *Visiting Assistant Professor:* Moore; *Affiliated Faculty:* Haik, Han, Hussaini, Howard, Johnson, Loper, Tam

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 expand 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, 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 School of Computational Science and Information Technology (CSIT), the Center for Material Research and Technology (MARTECH), and the Center for Nonlinear and Nonequilibrium Aero Science.

A complete description of the mechanical engineering graduate program, including recent changes, may be found at *http://www.eng.fsu.edu/departments/mechanical*.

Research Programs and Facilities

The **Advanced Mechanics and Materials Laboratory (AMML)** is primarily involved in the computational modeling and thermo-mechanical characterization of high performance materials. The research recognizes that there needs to be a paradigm shift from generating new materials purely from experimental methods to the use of computer models to effectively identify potential material systems. This is seen as the ideal way to develop advanced materials to meet the increasing demands of future space and automotive applications in a timely fashion. The overall objective of the laboratory is to engineer materials by establishing relationships between material constituents, processing and performance, and integrating them in computer models. The AMML is equipped with excellent facilities, including a highly automated Materials Testing System testing machine (MTS 810) and a Scanning Electron Microscope. The computational facilities include a network of dedicated workstations (VAX, Silicon Graphics and Macintosh). There is also a direct link to a supercomputer at The Florida State University (a Silicon Graphics Power Challenge XL).

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, that pose particular numerical simulation challenges. The computational program is supported by the School of Computational Science and Information Technology (CSIT) at The Florida State University, which operates an 168

node IBM SP-3 with 84 Gbyte of memory, as well as a heterogeneous compute cluster and serveral 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 m^2 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 N^2 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 H^2/D^2, 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 Tmin = 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.

Research in controls and mechatronics encompasses many different but related topics that can be divided into 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 **Fluid Mechanics Research Laboratory** (FMRL), is a well-established, nationally recognized laboratory with a diverse and dynamic research program. A number of faculty and scientists actively and collaboratively conduct research at FMRL, examining a broad range of fluid dynamic problems. The main areas of research are in high-speed flows and their control and the development of non-intrusive diagnostics for the study of complex flows. The laboratory contains a number of state-of-the-art testing and diagnostic facilities, not commonly available at university research centers. Some of these facilities include the following: a recently built *Hot Jet Anechoic Facility* capable of operating supersonic hot jets up to 2000° F. This facility is used for examining and controlling the aeroacoustic properties of supersonic jets at realistic Mach numbers and temperatures; a *STOVL* (Short-Take Off Vertical Landing) *Hover Test Facility* that is used mainly to study and control jet-induced aerodynamic phenomena on STOVL models during hover; an *optical diagnostic* development lab and a *combustion laboratory*, a *supersonic* and a large *subsonic wind tunnel*. The FMRL studies fundamental fluid dynamics problems that also have direct practical applications. Some of the current research programs include active control of supersonic jet noise and mixing; control of supersonic impinging jets; control of supersonic cavity flows; development of high-fidelity, three-dimensional *Particle Image Velocimetry* (3D-PIV); control of separated flows in engine inlets; supersonic flows at micro-scales; and aeroacoustic behavior of supersonic jets issuing from nozzles of various geometry. Research is supported by and conducted in close collaboration with industry and government agencies, such as Boeing, NASA, Office of Naval Research (ONR) and Air Force Office of Scientific Research (AFOSR). Over the past few years, research has been funded at a level of $1 - 1.5 million/year.

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 microimage 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), superplastic 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.

Graduate students participating in research are provided office space in the laboratories and have access to substantial staff support from their research group.

Master of Science

The department offers a thesis-type program and a course-type program for the master of science (MS) degree. The program includes common core courses, depth courses in the student's major area, and breadth courses in other areas of mechanical engineering outside the student's area of focus. Currently, depth courses are offered in the general areas of fluid mechanics and heat transfer, mechanics and material science, and dynamics and control, including robotics and mechatronics. A total of thirty (30) semester hours of coursework is required to complete the program under the thesis option, while thirty three (33) credit hours are required under the non-thesis option. A complete catalog detailing the program is available in the department or may be found on the department website.

Admissions

For admission, candidates should possess a bachelor's degree in mechanical engineering or a related discipline from an accredited institution. Students who do not possess such a degree will be required to complete a department-designated sequence of undergraduate courses with grades of "B" or better. Candidates should meet all other University requirements for admission, including the Graduate Record Examinations (GRE).

General Requirements

All students must take the following minimum distribution of courses (thirty [30] semester hours under the thesis option; thirty-three [33] semster hours under the non-thesis option.)

Common Core Courses

Fifteen (15) semester hours: EML 5060, Analysis in Mechanical Engineering (3), two (2) of the core courses in the major area (either dynamics and controls, solid mechanics and materials, or fluid mechanics and heat transfer), and one (1) course in each of the two remaining areas.

Core courses in dynamics and controls: EGM 5444, Advanced Dynamics (3); EML 5317, Advanced Design and Analysis of Control Systems (3).

Core courses in solid mechanics and materials: EGM 5611, Introduction to Continuum Mechanics (3); EGM 5653, Theory of Elasticity (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 5709, Fluid Mechanic Principles with Selected Applications (3).

Major Depth Area

Six (6) semester hours: two (2) additional courses from the student's chosen depth area.

Additional Free Elective Courses

Three (3) semester hours: courses selected from an approved list in consultation with the student's adviser. Courses may include EML 5905r, 5910r, and 5930r.

Thesis Option Requirements

In addition to the above general requirements, students must take a minimum of six (6) semester hours of EML 5971r, Thesis (3–6), and EML 8976r, Masters Thesis Defense (0). Of the courses taken, at least twenty-seven (27) semester hours must be taken on a letter-grade basis.

Non-thesis Option Requirements

In addition to the above general requirements, students must take an additional nine (9) semester hours of coursework selected from an approved list and in consultation with the student's graduate committee. Of the courses taken, at least thirty (30) semester hours must be taken on a letter-grade basis.

Doctor of Philosophy

Before students can be admitted to candidacy for the doctor of philosophy (PhD) degree, they must satisfy the following requirements: 1) the student should have fulfilled the department's requirements for the master's degree or its substantial equivalent; 2) passed the doctoral qualifying examination, usually taken during the second semester of the program, if the student enters the program with an MS degree in mechanical engineering; and 3) the student should have completed three units of supervised research (EML 5910r). A complete catalog of requirements may be obtained from the department.

Research on the doctoral dissertation may not be started formally prior to passing the preliminary examination.

After selecting an area for study and research, a candidate, in consultation with their dissertation supervisor, forms a doctoral dissertation committee, which assists in the formulation of research and study programs and monitors the candidate's progress. The subjects selected to fulfill the major and minor program requirements must be approved by the committee. The candidate's mastery of the major area is tested by an oral general examination (preliminary examination) administered by the doctoral dissertation committee after completion of the major subjects.

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 and publications in archival journals serve, 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.

Course Requirements

Beyond the master's degree a total of forty-five (45) additional semester hours of work is required, of which twenty-one (21) semester hours must be letter-graded course work. Normally, continued registration is expected for each semester the student requires departmental consultation in completing dissertation work. The twenty-one (21) semester hours of course work are chosen by the candidates with the approval of their advisers from a list of courses which can be obtained upon request from the department and must include nine units of advanced mathematics.

A student wishing to complete the PhD requirements in four years of graduate study should ordinarily complete the MS by the fall of the second year; pass the qualifying examination by the spring of the second year; and complete the course work, demonstrate feasibility of research methods, obtain approval of the dissertation proposal, and pass the oral general examination by the end of the third year. The PhD dissertation normally represents at least one full year of research work and must be a substantial contribution to knowledge.

Definition of Prefixes

EGM — Engineering Mechanics
EGN — General Engineering
EMA — Materials Engineering
EML — Mechanical Engineering

Graduate Courses

EGM 5351. Introduction to Finite Element Methods of Analysis (3). Prerequisite: EGN 5456. Study of variational principles, weak formulation, finite element formulation of second and fourth order equations, and computer code development.

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 5630. Mechanics of Composite Materials (3). Prerequisite: EGM 5611. Micromechanics of fiber-reinforced composites; thermomechanical characterizations of polymeric, metallic, and ceramic matrix composite; failure mode; interface and design of composite structures.

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 5671. Theory of Plasticity and Viscoelasticity (3). Prerequisite: EML 5155. Provides knowledge of inelastic behavior of materials under multiaxial loading conditions which is essential to mechanical engineers specializing in solid mechanics.

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 6290. Advanced Mechanical Vibrations (3). Covers analytic dynamics, continuous systems, approximate and finite element methods, nonlinear vibrations, and computational techniques.

EGM 6470. Control Systems Design (3). Prerequisites: EGM 5630; EML 5311. Provides students with the basic system theory and design techniques to enable them to design controllers for mechanical engineering systems.

EGM 6565. Computational Materials Science (3). Prerequisites: EGM 5611; EML 5060. Course covers mathematical description of materials at atomic, continuum and meso scales; deformation and defects in solids; evolution of microstructure in polycrystalline and composite materials.

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.

EGN 5455. Numerical Methods in Engineering (3). Prerequisites: CGS 3410 or equivalent; MAP 3305. The application of numerical methods to the solution of engineering problems including general principles, linear equations, solution of nonlinear equations, interpolation and least squares, integration, ordinary differential equations, introduction to finite differences, and finite elements.

EGN 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 5185. Composite Materials and Structures (3). Prerequisites: EGM 3520; EML 3234, 3302L. Includes a treatise of the various methodologies of processing and property characterizations. Design aspects and industrial applications of current advanced composite materials in all major categories.

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 3234 or permission of instructor. 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 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 5104. Advanced Engineering Thermodynamics (3). Prerequisite: EML 3101. General principles of thermodynamics; postulational treatment of the laws of thermodynamics; development of formal relationships and principles for general systems; application to pure substance, multiphase mixtures, chemical, magnetic, and elastic system.

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 5451. Energy Conversion Systems (3). Prerequisites: EML 3101, 3140, 3701. Investigation of such energy conversion systems as the internal combustion engine, compressors and turbines, gas turbines, nuclear power plants, garbage burning power plants, solar, wind, geothermal and electrical systems.

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, microprocessor system design and computers, kinematic equations, and motion trajectories.

EML 5835. Advanced Robotics and Mechatronics (3). Prerequisites: EML 4800 and 5802. Course covers computer vision for robotic systems, manipulator kinematics and dynamics, manipulator control, artificial intelligence, mechatronics product design and development, and microprocessors in mechatronic systems.

EML 5905r. Directed Individual Study (1–6). (S/U grade only.) Prerequisite: Instructor consent. May be repeated to a maximum of twelve (12) semester hours.

EML 5910r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

EML 5930r. Special Topics in Mechanical Engineering (1–6). Prerequisite: Instructor consent. 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 (12) semester hours.

EML 5935r. Mechanical Engineering Seminars (0). (S/U grade only.) May be repeated to a maximum of ten (10) times.

EML 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

EML 6157. Radiative Heat Transfer (3). Prerequisite: EML 5152. Presents a comprehensive, systematic, and unified treatment of fundamental concepts, basic theory, and methods of solution to radiative transfer problems and the interaction of radiation with other modes of heat transfer.

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 6716r. Advanced Topics in Fluid Dynamics (3–6). Prerequisite: EML 5709. Topics vary from term to term and include: boundary layers, jets, free shear layers and wakes, acoustics, shock waves and related discontinuities, one dimensional unsteady flow, steady supersonic flow in two dimensions, transitions, and turbulence. May be repeated to a maximum of six (6) semester hours.

EML 6726. Advanced Computational Fluid Dynamics (3). Prerequisites: EML 5060, 5725. The CFD methods will be applied to several examples as computing projects. They include flow in channels, over flat plate, and airfoils. Through these examples, students will obtain experiences in developing and following the numerical procedures in solving the compressible viscous flow problems. Topics covered are algorithm application and optimization on super-computers; boundary-layer computations; INS, PNS, and RANS simulations.

EML 6980r. Dissertation (1–12). (S/U grade only.) May be repeated to a maximum of forty-eight (48) semester hours.

EML 8966r. Master's Comprehensive Examination (0). (S/U grade only.) May be repeated twice.

EML 8968. Preliminary Doctoral Examination (0). (S/U grade only.)

EML 8976r. Master's Thesis Defense (0). (S/U grade only.)

EML 8985r. Dissertation Defense (0). (S/U grade only.) May be repeated to a maximum of three (3) times.

MEDICINE

College of Medicine

Chair, Department of Biomedical Sciences: David Balkwill; *Chair, Department of Medical Humanities and Social Sciences*: Suzanne Johnson; *Chair, Department of Family Medicine*: TBA; *Faculty Administrator/Academic Administrator, Department of Clinical Sciences*: Edward Bradley; *Chair, Department of Geriatrics*: Kenneth Brummell-Smith; Keel; *Director, Family Medicine Curriculum:* Stine; *Professors*: Balkwill, Bland, Bradley, Brooks, Brummell-Smith, Costa, Grossman, Harris, Johnson, Keel, Klatt, Light, Littles, J. Lloyd, McLeod, McGee, Ouimet, Patrick, Payer, Rill, Shahady, Steele, Stine, Trowers, Usatine, Van Hartesveldt; *Clinical Professors*: Maitland, Pruett, Robinson, F.Walker, Wilson; *Associate Professors*: Baker, Boland, Hurt, Levitt, Tomkoviak; *Clinical Associate Professors*: Berkowitz, Cavanagh, Cross, Curci, Fleming, Forman, Kepper, Levenson, Martin, Miles, Oldham, Powell, Van Landingham, Wells; *Assistant Professors*: Altmann, Clarke, Reyes, Stefanovic, Wang; *Clinical Assistant Professors*: Abebe, Anderson, Aron, Ayala, Beeckler, Betancourt, Blackshear, Breland, Bush, Campo, Chicola, Childers, Clements, Cognetta, Crane, Cross, Currieo, Dalrymple, K.Davis, Escobar, Forster, Foster, Fleming, Fuentes, Gilleon, Ginaldi, Golden, Grier, Gunter, Handler, Hempel, Hicks, Hinman, Hogan, Holmes, Hunter, J.Hurt, Jones, Kaufman, Kessler, Khodr, Knobbe, Kramer, La Rosa, Laurie, Lee, Liberti, Mabry, Madruga, Mahoney, Mauro, Mayeaux, T.McCoy, Meadows, Meek, Meuser, Meyer, Miles, Mobley, Mueller, Newberry, Nguyen, Omotayo, Ortiz, Pappachristou, Platt, Pomm, Preston, Reese, Reisman, Ricke, Riganese, Serio, Shafer, Shearer, T.Sherraden, Simkin, Slade, Stabile, Stavros, Strong, Sumlar, Sweeney, Thornberry, Underwood, Van Vessem, Vicari, T.Walker, Wasson, Wilkens, B. Williams, G. Williams, Wilson, Winchester, N.Wright, S.Wright, Wood; *Associates in Medicine*: Clark, Clawson, Menachemi; *Assistants in Medicine*: Berne-Anderson, Hill, Livingston, A.McCoy, Randolph; *Clinical Instructors*: Goslin, D.Lloyd, Myers, S.Sherraden, Watt, R.Williams, Wolfson; *Librarians*: Dexter, Nagy; *Visiting Professors*: Gregory, Posner; *Visiting Assistant Professor*: Kabbaj

The Florida State University College of Medicine provides a four-year program of study leading to the medical doctor (MD) degree. Receipt of the medical doctor degree is a requirement for admission to medical residency programs and is a prerequisite for the practice of medicine.

The purpose of the College of Medicine is to train generalist physicians for practice in ambulatory settings, specifically, to serve currently underserved populations, i.e., rural, inner city and geriatric patients in the state of Florida.

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 Prefix

BCC — Basic Clinical Clerkship (Required)
BMS — Biomedical Science

Graduate Courses

BCC 6942. 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). 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 (6). This course is a continuation of the first-year doctoring course. It emphasizes normal biobehavioral development across the life-span.

BMS 6017. Doctoring 103 (6). This course is a continuation of the first-year doctoring course. It emphasizes an introduction to diagnostic reasoning and clinical decision-making.

BMS 6110C. Clinical Microscopic Anatomy and Laboratory (4). 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). 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 use learning resources such as faculty, textbooks, journals and computer resources. The course also promotes the development of student-directed problem solving skills in small group settings utilizing the knowledge base and the gaps in that knowledge base needed to understand the applications of clinical anatomy to clinical reasoning. 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 6204r. Medical Biochemistry and Genetics (4). 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. General Medical Microbiology and Infectious Disease (3). In order to understand microbial pathogens and the body's response to infection, basic principles of medical microbiology and essentials of infectious are studied with host defense mechanisms; interaction of pathogens with defenses; and biology of bacterial, viral, fungal, parasitic pathogens and the diseases they cause, presented with clinical examples.

BMS 6302. Systemic Medical Microbiology and Infectious Disease (2). Prerequisite: BMS 6301. This course is a more detailed study of infectious disease in organ systems, including the morphologic and biological behavior of infectious agents; functional and clinical implications with relevant clinical case examples, and use of laboratory testing for diagnosis and treatment.

BMS 6401. General Medical Pharmacology (3). An introduction to the concepts of drug interaction (drug-receptor interactions, drug absorption, distribution, and elimination), this course introduces most major classes of drugs, and emphasizes biochemical and physiological bases for understanding drug action. Groups of drugs studied include antonomic, antineoplastic, and antimicrobial compounds.

BMS 6402. Systemic Medical Pharmacology (3). Prerequisite: BMS 6401. This course examines pharmacologic agents used in organ systems, including drug class-interactions, specific usages (functional and clinical applications), and therapeutic drug monitoring with clinical examples. The drug groups include cardiovascular, hormonal, analgesic, diuretic antimicrobial, central nervous system, and gastrointestinal agents.

BMS 6511. Organ Physiology (4). Cardiovascular, respiratory, renal and gastrointestinal physiology; physiology of the adrenal and thyroid gland; metabolism.

BMS 6520. Systemic Physiology (2). Building upon the principles learned in the first-year physiology course the medical student studies in detail the physiology of the cardiovascular, pulmonary, renal, gastrointestinal, and nervous systems. Concepts of physiology are integrated with clinical applications in courses taught concurrently.

BMS 6601. General Pathology and Immunology (4). This course introduces medical students to immunology and inflammation, emphasizing their interaction and function in host protection, transplantation, and disease causation. Relevant clinical examples are provided. This course provides the conceptual basis for understanding the cause and course of disease and how the body responds to injury.

BMS 6602. Systemic Pathology and Laboratory Medicine (6). Prerequisite: BMS 6601. This course is a detailed study of the pathology of organ systems; the morphologic, biochemical, and biological behavior of various diseases are covered. Functional and clinical implications are presented with relevant clinical case examples, including the use of laboratory testing for diagnosis and treatment.

BMS 6706C. Clinical Neuroscience (7). 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. Psychosocial Aspects of Medicine I (2). By focusing on behavioral medicine, ethics, cultural contexts of medicine and spirituality, students learn to apply the biopsychosocial approach to a variety of medical problems, to communicate effectively with patients and colleagues and to develop professionally. The focus of the course is the analysis of these issues as they arise in medical cases.

BMS 6822. Psychosocial Aspects of Medicine II (4). Prerequisite: BMS 6821. The medical student studies in detail ethical, legal, cultural and behavioral issues in medical practice with clinical applications, using relevant clinical case examples. Problem solving, collaboration and integration of skills with the clinical practice of medicine courses are emphasized.

BMS 6823. Health Issues in Medicine (2). This course provides instruction in clinical epidemiology, biostatistics, preventive medicine and strategies for analyzing and improving public health. The critical appraisal of the medical literature is emphasized.

BMS 6831. Doctoring 201 (6). This course will examine how to apply physical examination and interviewing skills, collecting, organizing, and communicating data to understand signs and symptoms and provide care for patients.

BMS 6832. Doctoring 202 (7–9). Prerequisite: BMS 6831. In this course, students refine their skills in patient interviewing, the physical examination, and diagnosis through interactions with standardized patients, the study of various disease states and the management, treatment, and prevention of disease conditions. Medical informatics, the Clinical Learning Center, case-based learning models, and community-physician preceptorships offer venues for learning and developing the knowledge base and clinical skills for practicing evidence-based medicine.

BMS 6940. Internship/Practicum/Clinical Practice (1). (S/U 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.

BCC 7110. Third Year Internal Medicine (8). (S/U grade only.) 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 7130. Obstetrics/Gynecology Clerkship (6). (S/U grade only.) 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 with close supervision by the staff.

BCC 7140. Pediatrics Clerkship (6). (S/U grade only.) 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). (S/U grade only.) 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). (S/U grade only.) 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). (S/U grade only.) 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 7175. Clerkship in Family Medicine (6). (S/U grade only.) 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.

Fourth-Year Required Clerkships

Required Courses	Required Hours
BCC 6126 Geriatrics	4
BCC 6174 Advanced Family Practice	4
BCC 6180 Emergency Medicine	4
BCC 6190 Advanced Internal Medicine	4
Elective Clerkships (total of twenty-four [24] weeks)	

Department of METEOROLOGY

College of Arts and Sciences

Chair: Robert G. Ellingson; *Professors*: *Barcilon, Ellingson, Fuelberg, T. Krishnamurti, Nicholson, +O'Brien, *Pfeffer, Ray, Zou*; Associate Professors*: Ahlquist, *Clayson, Kim, Ruscher*; Assistant Professors:* Bourassa, Liu; *Visiting Assistant Professor:* Cunningham; *Professors Emeriti:* Gleeson, LaSeur, Long, Staley, Stuart

* Also Associate, Institute of Geophysical Fluid Dynamics.

\+ Joint appointment with the Department of Oceanography

The Department of Meteorology was founded in 1949. At that time, the department had the only meteorology program in the southeastern United States. Throughout its history the department has had one of the leading meteorology programs in the country and at present is considered to be one of the top ten departments 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, atmospheric optics, boundary layer meteorology, climate prediction, cloud modeling, design of meteorological networks, laboratory studies of rotating fluids, large-scale flow, meso-meteorology, numerical weather prediction, ocean upwelling, physical climatology, radar meteorology, radiation physics, remote sensing, satellite meteorology, statistical prediction, tropical circulations, and turbulence.

Several major honors have been bestowed upon departmental faculty members. Professor T.N. Krishnamurti has received both the Carl-Gustaf Rossby Research Medal and the Second Half Century Award of the American Meteorological Society (AMS) for his outstanding contributions to the fields of dynamic and synoptic meteorology, particularly as they pertain to the structure and evolution of the tropics and tropical monsoon systems. In 1996, he was awarded the International Meteorological Organization Prize from the World Meteorological Organization (WMO) for international collaboration and his outstanding work in meteorology. He also has been named as a Lawton Distinguished Professor at The Florida State University as well as being selected as one of Florida's Outstanding Scientists. Professor James J. O'Brien has been awarded the Sverdrup Gold Medal for his research on the relationship between oceanic oscillations and climate. In addition, he was awarded the initial Distinguished Research Professor at The Florida State University as well as being named the 1999–2000 Robert O. Lawton Distinguished Professor. Eight members of the meteorology faculty are Fellows of the AMS, and various members are Fellows of the Royal Meteorological Society. Dr. O'Brien is also a Fellow of AGU and AAAS.

Members of the Department of Meteorology enjoy the benefits from advanced scientific equipment and a cooperative research environment with the departments of Mathematics and Oceanography, the Geophysical Fluid Dynamics Institute, and the School of Computational Science and Information Technology (CSIT). 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. The Florida State University also has recently acquired an IBM SP2, 512 processor making it one of the leading universities in the country in high performance supercomputing.

GOES satellite images are ingested by our direct readout groundstation and are available in real-time at various locations in the meteorology building and on our website, *http://www.met.fsu.edu.* The department also maintains an atmospheric instrumentation laboratory to support education and research in the area of experimental meteorology.

The department also is actively involved in K–12 meteorological education initiates on both the state and the national levels. One such program, EXPLORES!, has received state, national and international recognition for its success in improving math and science education. This project allows K–12 classrooms to participate in direct observation and retrieval of meteorological data, including satellite imagery, in support of each school's mathematics and science curricula. A new building that houses the National Weather Service in Tallahassee is adjacent to the meteorology/mathematics building, which further strengthens the department's ties to the weather forecast community. Partnerships and internships with the many state government agencies located in Tallahassee continue to offer new opportunities for our students.

Dr. O'Brien directs the **Center for Ocean-Atmospheric Prediction Studies (COAPS)** which uses knowledge of the ocean to predict climate and provides the climate data to all sectors of Florida. Dr. O'Brien is also the State of Florida Climatologist, which is housed by the department at the COAPS.

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 Department of Meteorology, 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 course work 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 must 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. A course in modern physics is desirable. Satisfactory completion

of these general requirements is expected to precede or accompany graduate level work. A score of at least 1000 on the aptitude test (verbal and quantitative) of the Graduate Record Examinations (GRE) is ordinarily required by the Department of Meteorology, along with a strong undergraduate record. Fellowships and assistantships are available to well-qualified applicants.

Master's Degree Program

A candidate for the master of science degree must satisfy all university-wide master of science requirements. At least eighteen (18) semester hours must be earned on a letter grade basis for the thesis plan and twenty-one (21) semester hours for the course plan. The minimum university requirements are thirty (30) semester hours for the thesis plan and thirty-two (32) semester hours for the course plan, of which supervised research (MET 5910) and supervised teaching (MET 5979) can be used for the master of science degree. Students electing the thesis plan must have credit for at least six (6) semester hours of thesis (MET 5971). All candidates for the master of science 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 master of science 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 in cooperation with the Department of Oceanography.

All doctoral candidates in meteorology must satisfy the following requirements: 1) the doctoral preliminary examinations, which may be combined with the masters comprehensive examination; 2) one (1) hour of MET 6930 for oral presentation of prospectus and one (1) hour of 6930 for oral presentation of dissertation; and 3) an acceptable doctoral dissertation. There is no foreign language requirement.

Definition of Prefixes

MAP — Mathematics: Applied
MET — Meteorology
OCP — Oceanography: Physical

Graduate Courses

Dynamical Meteorology

MAP 5431. Introduction to Fluid Dynamics (3). Prerequisites: PHY 2048C, MAP 4153. Corequisites: MAP 4341, 3306, 5345, or consent of instructor. 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 (18) 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 (Eadys baroclinic instability model, integral theorems, numerical models, flow-over topography, wave-mean interactions). May be repeated to a maximum of six (6) semester hours. May be repeated in the same semester.

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 (6) semester hours.

MET 6308r. Advanced Topics in Dynamical Meteorology (3). Prerequisite: Instructor approval. May be repeated to a maximum of eighteen (18) semester hours.

OCP 5253. Fluid Dynamics: Geophysical Applications (3). Prerequisite: MAP 5431 or consent of instructor. 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 5411. Radar Meteorology (3). Prerequisite: MET 4450 or consent of instructor. 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 approval. 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 consent of instructor. Microphysics of clouds. Development of warm and cold rain processes; hail formation, microphysical parameterizations, microphysical basis for weather modification and electrication.

MET 5471. Planetary Atmospheres (3). Prerequisites: MET 4450; MET 4302 or 5312, or consent of instructor. 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 approval. May be repeated to a maximum of eighteen (18) 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 consent of instructor. 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 5550. Statistical Weather Prediction (3). Prerequisites: MET 4500C; MAC 2313; a course in computer programming; and a 4000 level statistics course or equivalent. Probabilistic and statistical weather prediction, evaluation and utility of forecasts; decision making in meteorology; forecast quality and predictability of the atmosphere.

MET 6561r. Advanced Topics in Synoptic Meteorology (3). Prerequisite: Instructor approval. May be repeated to a maximum of nine (9) semester hours.

Climatology

MET 5105. Global Climate System (3). Prerequisite: Basic climatology course or consent of instructor. 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 consent of instructor. 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: Consent of instructor. 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 (18) semester hours.

Other Courses

MET 5090. 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 (24) semester hours.

MET 5906r. Directed Individual Study (1–3).

MET 5910r. Supervised Research (1–5). (S/U grade only.) Three (3) semester hours are required for a master's degree. May be repeated to a maximum of five (5) semester hours in each of the master's and doctoral programs.

MET 5920r. Colloquium: Topics in Meteorology Research (1). (S/U grade only.) Prerequisite: Consent of instructor. 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: Consent of instructor. 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 (6) semester hours required.

MET 5979r. Supervised Teaching (1–5). (S/U grade only.) A maximum of three (3) hours may apply towards a master's degree. May be repeated to a maximum of five (5) 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 (24) semester hours.

MET 6930r. Doctoral Seminar (1). Prerequisite: Instructor consent. Reports and discussions of meteorological research. Doctoral candidates give an oral presentation of their prospectus or dissertation. A minimum of two (2) semester hours is required.

MET 6980r. Dissertation (1–12). (S/U grade only.)

MET 8964r. Preliminary Doctoral Examination (0).

MET 8966r. Master's Comprehensive Examination (0).

MET 8976r. Master's Thesis Defense (0).

MET 8985r. Dissertation Defense (0).

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 consent of instructor. Flux of momentum, heat, and water; study of air-sea interaction mechanism of exchange and budgets. Also offered in the Department of Oceanography.

SCE 5366C Teaching Earth and Space Science (3). This course examines the pedagogical content knowledge needed to teach earth/space science.

MICROBIOLOGY
see Biological Science

Department of MIDDLE AND SECONDARY EDUCATION

College of Education

Chair: David Foulk

The Department of Middle and Secondary Education consists of six programs: English education, health education, mathematics education, multilingual/multicultural education, science education and social science education.

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 Teacher Preparation Programs and State Board of Education Rule 6A-5.066, Approval of Preservice Teacher Preparation Programs.

The following are offered by the Department of Middle and Secondary Education:

English education

Health education

Mathematics education

Multilingual/multicultural education

Science education

Social science education

Certificate in teaching English to speakers of other languages

The following course is applicable to each of the major programs in curriculum and instruction, listed below.

EDM 5046. The Middle School Child (3). Provides a theoretical and conceptual framework for understanding the middle school child and demonstrates the relevance of this understanding to middle school practice.

ENGLISH EDUCATION

Professor: Carroll; *Assistant Professors*: Bowman, Wood; *Professor Emeritus:* Simmons

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 course work in the teaching of English. Alternative tracks also allow for an emphasis on a) teacher certification; b) National Board Certification (for experienced teachers); c) teaching English as a Second Language; d) reading; or e) 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 towards the development of the graduate program. Master's, specialist, and doctoral advisory committees are typically composed of professors from both faculties.

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 (33) semester hours of course work. Twelve to fifteen (12–15) hours in English education, including LAE 5044, 5338, 5637, and RED 5337 or an approved secondary reading course alternate; from fifteen to twenty-one (15–21) hours will be in English (literature, rhetoric, or writing); and up to six (6) semester hours in a collateral field. In the four alternative tracks, courses in areas such as TESOL or reading will replace some of the English requirements, with English education faculty approval. 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 (3–6) hours of course work. All candidates take a comprehensive examination at the completion of the course work. 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 course work.

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, and a score of 1000 on the combined aptitude portions of the Graduate Record Examinations (GRE); and 2) completion of a minimum of twenty-one (21) semester hours of undergraduate course work 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 (6) semester hours of credit may be transferred from another institution.

Teacher Certification at the Graduate Level. Liberal arts graduates with a major in English may obtain teacher certification in secondary English (grades 6–12) while pursuing the master's degree. Students must fulfill the same requirements that apply to undergraduate certification, but most of the course work may be taken at the graduate level. The six (6) hours of required foundation courses may be taken as electives in the master's degree program. To obtain both a master's degree and certification, one must also take LAE 4360, Classroom Management and Planning Instruction in Middle/High School English (3), LAE 4860, Using Technology in Teaching Language Arts (3) (or an approved substitute), LAE 4941, Methods and Observation/Participation in Middle/Secondary English (2), and LAE 4942, Student Teaching in Secondary School English (12), in addition to the work required for the master's degree. Up to six (6) hours of work at the 4000 level may be credited to the master's degree.

Specialist Program

The specialist in education degree is available to experienced teachers already holding a master's degree. Thirty (30) semester hours beyond the master's degree are required, including work in professional education, English, 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 course work.

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 (3) 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.

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 course work.

Students must pass a written qualifying examination during the second semester of course work. A written and oral comprehensive examination (also referred to as the "preliminary examination") must be passed after completing course work and before presenting a prospectus of a dissertation. A dissertation must be written and defended in an oral examination.

Sixty-four (64) semester hours of course work 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 (24) dissertation hours after passing the comprehensive examination.

Core Courses

Each student's graduate program (master's and PhD) will include the following courses or the equivalent:

LAE	5064	Reader Response to Literature: Research and Practice (3)
LAE	5637r	Problems and Trends in Secondary English Curriculum (3–6)
LAE	5736	Written Composition in the Secondary School: Theory and Research (3)
RED	5337	Supervision and Instruction in Secondary School Reading (3)

Or an approved secondary reading course alternative.

Note: doctoral students whose master's program has included courses equivalent to one or more of those above may be directed into other education or English courses as indicated by their needs and interests.

Research Tool

At least twelve (12) semester hours of course work 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 to research on teaching and learning language. EDF 5410, Nonparametric Analysis Applications (2), is also generally useful to language researchers. 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 their major professor.

A minimum of thirty (30) 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 Prefixes

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 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 (6) 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 5908r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

LAE 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (12) semester hours.

LAE 5940r. Field Laboratory Internship (1–8). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

LAE 5945r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

LAE 5971r. Thesis (1–6). (S/U grade only.) Minimum six (6) semester hours required.

LAE 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) Minimum six (6) semester hours required.

LAE 6980r. Dissertation (1–12). (S/U grade only.)

LAE 8964r. Preliminary Doctoral Examination (0).

LAE 8966r. Master's Comprehensive Examination (0).

LAE 8968r. Specialist in Education Comprehensive Examination (0).

LAE 8976r. Master's Thesis Defense (0).

LAE 8978r. Specialist in Education Thesis Defense (0).

LAE 8985r. Dissertation Defense (0).

HEALTH EDUCATION

Professors: Foulk, Sutherland

Health education is any combination of learning opportunities designed to facilitate voluntary adaptations of behavior in individuals, groups, or communities conducive to health. Generally, these learning opportunities are based upon scientific principles in which individuals acting independently or in groups make informed decisions affecting their health. Included within the concept of health education are efforts directed toward assisting people to achieve an optimal level of health, to prevent disease and debilitating conditions from occurring, and to minimize the impact of such diseases and conditions upon individuals who have been affected. The health education specialist strives to select and implement techniques that are designed to reduce individual and/or community health problems which can best be corrected or compensated cost effectively through educational strategies.

General Degree

Requirements

The master's degree requires a minimum of thirty-two (32) semester hours. An internship of three to six (3–6) semester hours may be required if the student has had no previous health education experience. Once the student decides upon an area of specialization, nine to twelve (9–12) semester hours of elective courses will be selected in cooperation with the adviser to provide the appropriate skills needed in that area. The following four areas of concentration are possible for the student pursuing a master's degree in health education.

Governmental/Voluntary Agencies: state and federal health agencies, American Cancer Society, American Lung Association, Red Cross.

Corporate Health Promotion: employee wellness programs.

The Medical Care System: patient education, hospital-based wellness programs.

The School System: school health coordinator/ educator (teahcer certification is possible; check with department for specific requirements).

Admission Requirements

1. A minimum score of 1000 on the combined verbal and quantitative portions of the GRE or a 3.0 grade point avearage or above on upper-division course work. A GRE score must be posted in the applicant's file.

2. Three positive graduate school letters of recommendation;

3. A transcript of all completed college courses; and

4. A letter indicating program attendance after admittance to the University program.

Note: in addition to admission to the University, students must also be admitted to the Department of Middle and Secondary Education.

Curriculum

The student's program of studies is planned the first semester in consultation with an advisor. (bachelor of science health education program graduates will substitute URP 5526, The US Health Care System, and SYD 5137, Fundamentals of Epidemiology for HBC 5006 and HSC 5247.)

1. Courses

EDF	5400	Basic Descriptive and Inferrential Statistics Applications (4)
HSC	5006	Foundations of Health Promotion (3)
HSC	5247	Seminar in Community Health Education Program Planning and Evaluation (3)
MHS	5710	Research in Human Services (3)

2. Specialized Areas

HSC	5908	Directed Individual Study (1–3)
HSC	5915	Supervised Research (1–4)

Note: HSC 5908 and 5915 are the basis for a potential manuscript reading for publication. Specialized areas courses are selected in consultation with an advisor considering the students long term goals. Examples of specialized areas might include: adult education, gerontology, public health, allied health teaching and learning, wellness, technology, school health, health education in business and industry, and patient education in the medical setting. Remaining courses are planned with an advisor considering career goals.

Opportunities

The student will have an opportunity to engage in a supervised research project which will allow for the development of research skills as well as active involvement in the field of health promotion. Internships, where necessary, are available from a wide range of settings including corporate health promotion, hospital wellness programs, voluntary agencies, governmental agencies, and public schools.

Financial Aid

The health education program has limited fiscal assistance available for qualified students. Students are also encouraged to apply for college and University aid programs. Contact the department for further information.

Definition of Prefixes

HSA — Health Service Administration
HSC — Health Education and Safety

Graduate Courses

HSC 5006. Foundations of Health Promotion (3). This course surveys the theory and practice of health education. At the completion of this course students should be able to apply one of a number of health education theories to a community or school setting and outline the steps needed to develop, implement, and evaluate a program specific to those identified needs. Types of theories include underlying theories of health education, theories of individual behavior, and theories of integrative models of behavior change. Students will also be able to discuss the relationship between historical foundations in health education and the evolving health reform in our nation.

HSC 5142. Health/Drug Education/Promotion Strategies in Schools (3). Positive principles and strategies related to health and drug education are studied. Reviewed are physical, mental, social, and emotional aspects of drug use and abuse.

HSC 5247. Seminar in Community Health Education Program Planning and Evaluation (3). Discussion of techniques and strategies utilized in the development, implementation, and evaluation of community health programs.

HSC 5506. Epidemiological Practices for Health Educators (3). Study of epidemiological principles of community health, and causes, effects, and possible solutions of human health problems.

HSC 5817r. Supervised Community Health Education Field Experience (1–12). (S/U grade only.) Prerequisite: HSC 5245. Application of health education theory to practice in a community health agency. May be repeated to a maximum of twelve (12) semester hours. A maximum of three (3) hours may apply to the master's degree.

HSC 5875r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of four (4) semester hours. A maximum of three (3) hours may apply to the master's degree.

HSC 5908r. Directed Individual Study (1–3). May be repeated to a maximum of twelve (12) semester hours.

HSC 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of four (4) semester hours. A maximum of three (3) hours may apply to the master's degree.

HSC 5935r. Selected Special Topics in Health Education (3). An analysis of selected topics in health education. May be repeated to a maximum of six (6) semester hours.

HSC 8966r. Master's Comprehensive Examination (0).

MATHEMATICS EDUCATION

Associate Professors: Aspinwall, Jakubowski, Presmeg, Shaw; *Assistant Professor:* Fernandez; *Professors Emeriti:* Denmark, Kalin, Nichols, Wheatley; *Distinguished Professor Emeritus*: Nichols

Curricula in mathematics education are offered which lead to the master of science (MS), the specialist in education (EdS), and the doctor of philosophy (PhD). Graduate curricula have been designed to meet the needs and professional goals of those preparing for leadership roles in mathematics education. Opportunities exist for graduate students to participate in major research projects that are setting new directions and further research for K–20 school mathematics. Research among the faculty in mathematics education has focused on teacher education, mathematics curriculum, teacher beliefs, teacher change, technology, and K–20 student learning. The faculty are also heavily involved in curriculum development and teacher enhancement projects. For more information, see *http://www.fsu.edu/~candI/MATH.*

College Requirements

Please review all college-wide degree requirements summarized in the "College of Education" chapter of this *Graduate Bulletin.*

Master's Degree

Admission

Applicants must have a baccalaureate degree, must receive approval by the department chair, and must be approved by the program. Completion of the GRE with a minimum combined score of 1000 on the verbal and quantitative sections, **or** to have taken the GRE and have a grade point average of more that 3.0 in the final two years of the undergraduate degree is required. A GRE score must be posted in the applicant's file. When the student has been approved by the program, a temporary advisor will be assigned.

Curricula

Programs of study are designed based on student goals.To complete a master's degree, students may take either the thesis or nonthesis option. In the thesis option, students must take a minimum of twenty-four (24) semester hours of course work and six (6) semester hours of thesis. Students will defend their thesis in an oral examination conducted by their supervisory committee. Students taking the nonthesis option must take a minimum of thirty-two (32) semester hours of course work. These students have options for demonstrating successful completion of the program. These options are available from program faculty. During the first year in their program, students will select a supervisory committee consisting of a major professor and at least two additional members. The program of studies is planned with the student's supervisory committee to meet the specific needs and goals of the students. Required courses in the program include MAE 5146, 5658, 5690, 5691, 5795, 5865 or approved substitutes. Students with a professional goal to teach at the post-secondary level must satisty mathematics requirements in addition to the mathematics education requirements.

Specialist in Education Degree

Admission

Applicants must have a master's degree, must receive approval by the department chair, and must be approved by the program. Completion of the GRE with a minimum combined score of 1000 on the verbal and quantitative portions of the GRE **or** to have taken the GRE and have a grade point average of more that 3.0 in graduate work is required. A GRE score must be posted in the applicant's file. When the student has been approved by the program, a temporary advisor will be assigned.

Curricula

Programs of study are designed based on student goals. To complete a specialist's degree, students may take either the thesis or nonthesis option. In the thesis option, students must take a minimum of twenty-four (24) semester hours of course work and six (6) semester hours of thesis. Students will defend their thesis in an oral examination conducted by their supervisory committee. Students taking the nonthesis option must take thirty-two (32) semester hours of course work. These students have options for demonstrating successful completion of the program. These options are available from program faculty. During the first year in their program, students will select a supervisory committee consisting of a major professor and at least two additional members. The program of studies is planned with the students supervisory committee to meet the specific needs and goals of the student.

Doctoral Degree

The doctoral degree curriculum is intended for persons preparing for positions of leadership in 1) research in mathematics education; 2)supervision of school mathematics; and 3) teaching mathematics and/or mathematics education in community college, college, and university.

Admission

Applicants must have a master's degree in mathematics, mathematics education, or in some other approved field, and must be approved by the program faculty and the department chair. Teaching experience is recommended. A minimum score of 1000 on the combined verbal and quantitative portions of the GRE **and** more than a 3.0 grade point average on graduate work are required. Upon admission to the program, a temporary adviser is assigned.

Curriculum

In general, three or four years will be required to complete the PhD in mathematics education. Depending on program faculty evaluation of graduate work already completed, a program of study may consist of 42-48 hours. Students typically take courses in the following domains: mathematics education, psychological and social sciences in education, normative studies, and inquiry skills. If a master's in mathematics has not been obtained then graduate mathematics courses are taken to augment those previously completed. Course work in analysis, algebra, geometry, applications, topology, and number theory are especially relevant. All doctoral students in mathematics education are expected to take four doctoral seminars: MAE 6148, 6938 (learning), 6797 and 6939. Students are required to enroll for a minimum of twenty-four (24) semester hours of dissertation credit (MAE 6980r). A student may enroll in dissertation hours after passing the preliminary examination. A prospectus is prepared and formally defended prior to conducting the doctoral research study.

Diagnostic Examination

After completing one semester in the program, a diagnostic examination will be scheduled. The purposes of this examination are 1) to determine that satisfactory progress is being made and that the student is well suited for doctoral study in mathematics education at The Florida State University, 2) to establish an advisory committee, 3) to determine a major professor, and 4) to plan the program of study.

Preliminary Examination

Upon completion of formal course work, a preliminary examination is taken. To be eligible to take the preliminary examinations the student must: 1) register for MAE 8964r; 2) have an overall GPA of 3.0 for all graduate work completed; 3) have an approved program of study; 4) have passed sucessfully the diagnostic exam; 5) completed the research tool requirement; and, 6) provide evidence of scholarship. A current reading list is to be given to the committee. The preliminary exam consists of two parts, as described below:

1. **Written.** The major professor will determine the areas in which the student is to be examined and request questions be prepared by the examining committee;

2. **Oral.** An oral examination by the examining committee will be scheduled approximately 10 days after completing the written preliminary examination questions. At the oral examination, students will be asked to elaborate and/or clarify their responses to the written questions. Following the oral exam the committee will deliberate and determine whether the student is to be admitted to candidacy.

Prospectus

While a student may have a prospectus prepared by the time of preliminary examinations, it is submitted to committee members once a candidate has been accepted as a doctoral candidate. Formal College of Education guidelines for the preparation of the prospectus are available. The dissertation prospectus is prepared in consultation with the major professor and advisory committee. A formal defense will be scheduled at which the candidate will orally present the research plan. Once a signed copy of the prospectus has been filed with the College of Education, the dissertation research may begin. The minimum time between having an approved prospectus and dissertation defense is four (4) months.

Dissertation

A student becomes a candidate for the doctor of philosophy in mathematics education by passing the preliminary examination and may register for dissertation credit. A minimum of twenty-four (24) semester hours of dissertation credit is required. When the committee determines the student is ready to defend the dissertation, a defense is scheduled. The candidate must provide a complete copy of the dissertation to committee members one month prior to the examination. In the semester in which the candidates expect to graduate, they must register for MAE 8895r, Dissertation Defense (0).

Definition of Prefix

MAE — Mathematics Education

Graduate Courses

MAE 5146. School Mathematics Curriculum (3). Prerequisite: Instructor's consent. After establishing a theoretical perspective, major curriculum projects will be examined and critiqued. Reform movements will be considered in light of historical events and the current social climate.

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). Innovative topics or specific assistance related to classroom topics in the teaching of mathematics will be offered. May be repeated to a maximum of eight (8) semester hours.

MAE 5658. Using Technology in the Teaching of Mathematics (3). Prerequisite: One course in computers/technology or the instructors consent. Explores the uses of various technologies in mathematics classes, demonstrated through hands-on activities and experiences.

MAE 5690. Ethnomathematics (3). Addresses the theoretical, practical and research components that demonstrate the cultural bases of mathematics education. Mathematical activities from diverse cultures are shared; linguistic difficulties in math are discussed.

MAE 5691. Mathematics Learning and Teaching (3). Prerequisite: Instructor's consent. Students are introduced 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). The 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 (12) semester hours.

MAE 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (12) semester hours.

MAE 5946r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

MAE 5971r. Thesis (1–6). (S/U grade only.) Minimum of six (6) semester hours required.

MAE 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) Minimum of six (6) semester hours required.

MAE 6148. Curriculum in Mathematics Education (3). Prerequisite: Instructor's consent. 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 consent of instructor. In-depth study of research in mathematics education. 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's consent. 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 (12) semester hours.

MAE 6939. Seminar in Mathematics Teacher Education (3). Prerequisite: Consent of instuctor. Issues in mathematics teacher education at both the preservice and inservice levels will be examined from theoretical and practical perspectives.

MAE 6980r. Dissertation (1–12). (S/U grade only.)

MAE 8964r. Preliminary Doctoral Examination (0)

MAE 8966r. Master's Comprehensive Examination (0).

MAE 8968r. Specialist in Education Comprehensive Examination (0).

MAE 8976r. Master's Thesis Defense (0).

MAE 8978r. Specialist in Education Thesis Defense (0).

MAE 8985r. Dissertation Defense (0).

MULTILINGUAL/ MULTICULTURAL EDUCATION

Professor: Jenks; *Associate Professors*: Brooks, Platt; *Assistant Professors:* Hasson, Pappamihiel; *Professor Emeritus*: Leamon; *Courtesy Professor:* Lupo-Anderson

Multilingual/Multicultural Education (MMEd) is one of six programs in the Department of Middle and Secondary Education at The Florida State University. The MMEd program offers instructional programs leading to the Bachelor's, Master's and Doctor of Philosophy degrees, to the Specialist's Certificate (post-Master's), to course work leading to certification in Foreign Languages (K–12), and to the 'add-on' endorsement in teaching English to Speakers of Other Languages (ESOL).

Admissions requirements:

Master's degree programs:

- Application packet, including three (3) letters of recommendation;
- GRE score of 1000 or higher;
- TOEFL score of 570 (230 computer-based) or higher for international students.

Doctoral degree programs:

- Application packet, including three (3) letters of recommendation;
- GRE score of 1000 or higher;
- TOEFL score of 600 (250 computer-based) or higher for international students.
- Master's degree in the field of foreign/ second language education, TESOL, applied linguistics, or compatible field;
- Prior successful teaching experience (at least three [3] years preferred);
- Demonstrated spoken proficiency at the advanced level or better on the ACTFL Oral Proficiency Interview (OPI) for students specializing in Florida education;
- Reading knowledge in one foreign language (strongly recommended for all applicants).

Notes:

1. The sequence of courses begins in the **Fall** semester of each academic year, and the core course recommended during that semester is TSL 5005, Teaching of English as a Second/Foreign Language (4). Students who begin course work at any other time risk taking courses out of sequence.

2. International applicants are urged to complete the application process at least (6) months prior to their intended date of initial enrollment.

Teaching Certification at the Graduate Level

Certification and endorsement requirements may be completed at the graduate level in some areas.

1. **Foreign/Second Language Education:** At least thirty (30) semester hours in upper-division courses in the foreign language and professional education requirements (six [6] semester hours in the sociological and psychological foundations of education, six [6] hours in general methods, curriculum, school administration, or school supervision), a score in the advanced range of the ACTFL Oral Proficiency Interview, and a field laboratory internship.

2. **ESOL Endorsement:** Endorsement is an 'add-on' to an existing teaching certificate in early childhood education, English, elementary education, and special education. Coursework includes FLE 5195, 5365, 5595, 5795 and TSL 5005 for a total of sixteen (16) semester hours.

Master's Degree Programs

Foreign language education emphasis. Students in this program are required to complete the following for a minimum of thirty-two (32) semester hours: FLE 4945, 5195, 5365, 5595, 5795 and TSL 5005; additional courses from the MMEd program; and nine (9) semester hours of graduate-level coursework in the appropriate program in the Department of Modern Languages and Linguistics, College of Arts and Sciences. One additional linguistics course also must be taken (choose from LIN 5706, a linguistics-oriented FLE 5796r, or a course offered in another department).

All students take a written comprehensive exam (usually four to six [4–6] hours) at or near the completion of course work.

English as a second/foreign language emphasis. Students in this program are required to complete the following for a minimum of thirty-three (33) semester hours: FLE 5195, 5365, 5595, 5775, 5795, 5930, TSL 4945r, 5005. One additional linguistics course must also be taken (choose from LIN 5706, a linguistics-oriented FLE 5796r, or a course offered in another department). Remaining semester hours may be electives in the MMEd program or other programs inside or outside the College of Education as relevant to the student's goals. All students take a written comprehensive examination (usually four to six [4–6] hours) at or near the completion of course work.

Educational Specialist's Degree

The program for the specialist in education degree requires thirty (30) semester hours of work beyond the master's degree. Students applying for entrance into this program must have teaching experience. In addition to the required course work, students will take a comprehensive examination (usually seven to nine [7–9] hours) similar to that described in the following section.

Doctoral Degree Program

Language proficiency

Doctoral applicants in the foreign language education specialization must be prepared to demonstrate oral and reading proficiency in two foreign languages.

Supervision

Each student's doctoral program and coursework are supervised by a committee representing the MMEd faculty, the College of Education, and the University, with one MMEd faculty member serving as the advisor. Faculty on the committee provide required expertise according to the nature of the thesis topic, methodology, and theoretical framework.

Course Requirements

A total of thirty-six to forty-eight (36–48) semester hours of course work is required following admission to the program, including a minimum of thirty (30) semester hours in the major field at the graduate level. Additional coursework is dependent on evaluation of previous graduate work.

TESOL Specialization

Core requirements include FLE 5195, 5365, 5595, 5775, 5795, 6776, LIN 5706, TSL 5005 and 5930r.

Foreign Language Specialization

A student's program of studies should include work in professional education, literature, civilization and linguistics. Core MMEd requirements are the same as those listed above for the TESOL specialization.

Both Specializations

- **Minor:** A minimum of ten (10) semester hours in a related minor area in the College of Education or any other academic unit having courses relevant to the student's interest;

- **Research Tool:** At least thirteen (13) semester hours of coursework in research tools (methods of research, statistics and inquiry). EDF 5400, Basic Descriptive and Inferential Statistics Applications (4), and EDF 5401, General Linear Model Applications (4), are required research courses, with further qualitative or quantitative options depending on the student's intended research agenda;
- **Dissertation Hours:** At least twenty-four (24) semester hours of dissertation following the successful completion of the preliminary examination. At least two (2) dissertation hours must be taken each semester, until the dissertation defense semester, at which time a minimum of three (3) semester hours of dissertation must be taken.

Note: comparable graduate courses taken at other institutions may be substituted as meeting the core requirements on the student's program of studies.

Exams and Dissertation

- A written qualifying examination during the second semester of course work;
- A written/oral preliminary examination (usually seven to nine [7–9] hours) of written testing after completing all coursework and prior to presenting a prospectus for the dissertation;
- A prospectus that includes the introductory, literature review, and methodology chapters of the proposed dissertation. Successful defense is followed by the collection and analysis of data. The prospectus is defended in an oral examination;
- A dissertation that cannot be defended sooner than four (4) months after the prospectus is defended. An open oral dissertation defense also is required.

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

FLE 4945. Associate Teaching in a Foreign Language (10). (S/U grade only.) Prerequisites: FLE 3033, 4941, passing on FTCE.

TSL 4945r. Associate Teaching in English as a Second Language (2–10). (S/U grade only.) May be repeated to a maximum of ten (10) 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 5195. Development of Curriculum and Materials in Foreign Languages (3). Students begin with a review of L2 learning stages and of contemporary curricular designs that pertain to teaching second/foreign languages. They learn to analyze and existing curricula, materials and technology, and participate in the process of developing original units and materials.

FLE 5295. 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.

FLE 5365. Teaching of Culture: Multicultural/Multilingual Perspectives (3). This course examines culture and its scope, identification of goals and development of course objectives. Students locate and analyze sources, materials and activities. They learn how to teach and measure cultural achievement.

FLE 5595. Testing and Evaluation in Foreign Languages (3). This course focuses on language assessment with objectives related to classroom assessment, proficiency testing and standardized testing. Students also develop expertise in basic statistical processes and program assessment.

FLE 5775. 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.

FLE 5795. Applied Linguistics in Foreign Language Teaching (3). Students in this course address 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.

FLE 5796r. 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 (12) semester hours.

FLE 5908r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

FLE 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

FLE 5940r. Field Laboratory Internship (1–8). (S/U grade only.) May be repeated to a maximum of of eight (8) semester hours.

FLE 5945r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

FLE 5971r. Thesis (1–6). (S/U grade only.) Minimum of six (6) semester hours required.

FLE 5973r. Specialist in Education Thesis (1–6). (S/U grade only.)

FLE 6776. 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.

FLE 6980r. Dissertation (1–12). (S/U grade only.)

FLE 8964r. Preliminary Doctoral Examination (0).

FLE 8966r. Master's Comprehensive Examination (0).

FLE 8968r. Specialist in Education Comprehensive Examination (0).

FLE 8976r. Master's Thesis Defense (0).

FLE 8978r. Specialist in Education Thesis Defense (0).

FLE 8985r. Dissertation Defense (0).

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.

TSL 5005. Teaching of English as a Second/Foreign Language (4). This course is an introduction to teaching English to non-English speakers. Students study second language teaching strategies and techniques and review teaching methodologies. This course also includes a practicum experience in which students are partnered with non-native English speakers.

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 noncontent 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 5908r. Directed Individualized Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

TSL 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (9) semester hours.

SCIENCE EDUCATION

Associate Professors: Davis, Gallard

http://www.fsu.edu/~CandI/SCIENCE/science.html

Curricula in science education are offered which lead to 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 The Florida State University's laboratory school.

The Florida State University is a major role site for curriculum development in science education. Advanced technology incorporating microcomputers and videodisks is used to prepare problem-solving materials for middle school learners. The focus of the programs, research, and development is on enhancing the quality of learning and teaching science.

Master's Degree

Admission

The applicant must receive the approval of the department chair as well as the program admissions committee and be accepted by an adviser.

Applicants must have a baccalaureate degree in some field of science, education, or psychology. A minimum score of 1000 on the combined verbal and quantitative portions of the GRE or a GPA of 3.0 in the last two years of the baccalaureate degree is required. International students must have a minimum TOEFL score of 550 on the paper-based test or 213 on the computer-based test.

Curricula

To complete the master's degree, students must write a thesis or complete a specified portfolio and complete a minimum of thirty-three (33) semester hours of course work 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.

Specialist in Education

Admissions

Applicants must receive the approval of the department chair as well as the departmental admissions committee and be accepted by an adviser. A minimum score of 1000 on the combined verbal and quantitative portions of the GRE also is required. In addition, applicants for the specialist degree must already have a master's degree in science, science education, or a related field, plus teaching experience or equivalent relevant experience in science education.

Curricula

A minimum of thirty (30) semester hours of course work 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

Admissions

Applicants must receive the approval of the department chair as well as the departmental admissions committee and be accepted by an adviser. A minimum score of 1100 on the combined verbal and quantitative portions of the GRE and a 3.0 GPA in previous graduate degrees is required. International students must have a minimum TOEFL score of 550 on the paper-based or 213 on the computer-based test. In addition, applicants for the doctoral degree must already have a master's degree in science, science education, or a related field, plus successful teaching experience or equivalent relevant experience in science education.

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 courses, twenty-nine to thirty-five (29–35) semester hours; dissertation in science education, twenty-four (24) semester hours minimum; science courses, thirty (30) semester hours; inquiry or research methodology, twelve (12) semester hours; and educational foundations courses, fifteen (15) semester hours.

Postbaccalaureate 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 (45) semester hours of graduate study in residence at The Florida State University; thirty-six (36) 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 (6) or fewer hours of course work 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 (24) semester hours of dissertation credit. Prior to writing 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 six (6) semester hours of dissertation credit.

The course work 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 any of the above graduate degrees 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. Candidates for certification must complete a minimum of forty-six (46) semester hours of science (graduate and/or undergraduate), six (6) semester hours of educational foundations, and twenty-one (21) semester hours of science education. The courses in science education include courses in teaching and learning, curriculum and research, and must be completed, along with 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 which count for certification can be graduate and/or undergraduate courses from The 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. Curricula must meet current rulings.

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 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 5366C. Teaching Earth and Space Science (3). Includes traditional discipline categories of geology, meterology, astronomy, and oceanography. Utilizes National Science Education standards to organize subject matter, which is the focus of this pedagogical course.

SCE 5625. 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 5635r. Special Problems in the Teaching of Secondary School Science (1–3). May be repeated to a maximum of nine (9) semester hours.

SCE 5715. 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.

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 5905r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

SCE 5910r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (8) 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 (16) semester hours.

SCE 5946r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

SCE 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

SCE 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

SCE 6145. 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 6335r. 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 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 6615. Problems in Elementary Science (3). Provides opportunities to acquire knowledge and skills related to planning and implementing a science program for elementary school children.

SCE 6761r. Research, Recent Developments, and Current Issues in Science Education (3–5). May be repeated to a maximum of ten (10) 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 (8) semester hours.

SCE 6938r. Advanced Seminar in Science Education (2). Consists of a sequence of four (4) 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 (8) semester hours.

SCE 6980r. Doctoral Dissertation (1–12).(S/U grade only.)

SCE 8964r. Preliminary Doctoral Examination (0).

SCE 8966r. Master's Comprehensive Examination (0).

SCE 8968r. Specialist in Education Comprehensive Examination (0).

SCE 8976r. Master's Thesis Defense (0).

SCE 8978r. Specialist in Education Thesis Defense (0).

SCE 8985r. Dissertation Defense (0).

SOCIAL SCIENCE EDUCATION

Professor: Lunstrum; *Assistant Professor:* Gutierrez

The graduate 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.

Program 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 curricula in social science education lead to the master of science (MS), specialist in education (EdS), doctor of philosophy (PhD), and doctor of education (EdD) degrees.

The master's degree 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 (30) semester hour thesis-type program or a nonthesis thirty-two (32) 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 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.

The specialist degree program is designed for school and college practitioners who want to improve their knowledge and skills in social science education and for persons who want to gain special competency in the field beyond the master's degree. A candidate may choose to write a thesis as part of the thirty (30) semester hour requirement.

Candidates for the master's or specialist degree are encouraged to concentrate in one general substantive area of knowledge or skill development and successfully pursue studies in that area. The various areas include: United States history, government, geography (traditional content areas); ethnic and bilingual studies, Latin American affairs, humanities, American studies, population education, law education (interdisciplinary programs); or very specialized programs occasionally desired by a candidate (i.e., logic and inquiry, curriculum design, testing and evaluation, cross-cultural studies of values and attitudes). Interdisciplinary and very specialized programs must be organized around, and justified with reference to, a specific theme. The majority of candidates may elect the more traditional areas, but options are left open for other candidates who have their own goals and specialized interests. Specific courses in any program will be selected by the candidate with the advice of the major professor.

The doctoral program which leads to the PhD or EdD is designed to prepare community college teachers, university instructors, researchers, and curriculum leaders who draw upon the social and behavioral sciences to understand and investigate problems in education. The program competencies will be developed in formal courses and in research seminars and projects especially designed for the student by the faculty. The course work and research experiences of the candidate are designed to satisfy the requirements for the doctoral degree at The Florida State University. This program of graduate studies extends normally over a period of three years beyond the bachelor's degree. It combines courses in three major areas: 1) curriculum and instruction in social science education; 2) sociological and psychological foundations of education; and 3) cognate work in the behavioral sciences, social sciences, and humanities. The student is expected to participate in new or ongoing research or instructional projects soon after admission into the graduate program. The program should enable a student to occupy a teaching and/or a research position in higher education or a school system. A student in this program can prepare to: 1) teach courses in social science education and in the social or philosophical foundations of education; 2) accept joint responsibilities for teaching and/or for research in education and social science departments (e.g., education and political science, education and economics); and 3) become a director of research or curriculum development in an educational system desiring special competencies in learning and instruction.

The program of study leads to the doctor of philosophy or doctor of education degree and prepares graduate students to attain the following competencies:

1. A thorough knowledge and understanding of the concepts and tools of investigation in at least one social science, behavioral science, or humanistic discipline chosen from the fields of anthropology, economics, geography, history, political science, social psychology, international affairs, or sociology, and some familiarity with a second field chosen from the disciplines listed above or an interdisciplinary combination of social science. If humanities is chosen as a primary field, the second field will be chosen from social or behavioral science;

2. A knowledge and understanding of the concepts and tools of investigation of the social and psychological foundations of education, particularly knowledge that emphasizes the role of education in society, demographic and social factors impinging upon the educative process, the psychological and social stages of development of the individual, and theories of learning;

3. A knowledge and understanding of the general curriculum field, including practical considerations of supervision, curriculum development and instruction, plus theoretical dimensions in the construction of educational programs;

4. Ability to synthesize the experiences from the foregoing three competencies and to apply them to educational problems and research topics in the field of social studies education. These applications will include experiences in supervising student teachers, teaching undergraduate classes, and consultation with school systems;

5. Ability to organize substantive and research experiences around meaningful topics such as inquiry instruction, bilingual/bicultural education,

political socialization, population and environmental education, ethnic science, controversial issues, and reading and writing in social studies;

6. Knowledge of, and experience with, the design, preparation, and execution of research in social science education. Research is here defined in terms of historical, experimental, qualitative, and survey research, including curriculum and materials development; and

7. In addition to cognitive background in the substantive fields and research skills, the development of a predisposition to inquire continuously into significant problems of education and to seek personal and career satisfaction by conducting research, curriculum development, and/or teacher education.

Master's Degree - Post Certification

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.

This master's degree program is designed for those students who currently have a teaching certificate. Students have a choice of a thirty-two (32) semester hour program or a thirty (30) hour thesis program. The thirty-two (32) semester hour program requires that the student take comprehensive examinations during the last semester coursework. This track of study requires fourteen (14) semester hours of social science education (SSE) credits and eighteen (18) semester hours of concentration in one of the social science teaching field specializations (Example: American History/Economics/Government/World History.)

The second track of study is a thirty (30) semester hour thesis-type program. This track requires fourteen (14) semester hours of social science education (SSE) credits and sixteen (16) semester hours of social science credits. The specified program for either track will be developed by the student with the assitance 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 or the comprehensive examination. Only six (6) semester hours of 4000 level course work may be counted toward the degree. Only six (6) semester hours may be transferred for the degree. Twenty-one (21) semester hours must be taken with a letter grade. Only nine (9) hours of special students credit may be used toward the degree.

Specialist Degree

For admission to the specialist in education program, students must have a master's degree with a 3.0 GPA in an appropriate discipline from an accredited institution, a minimum 1000 GRE score, and the approval of the graduate faculty.

The specialist degree program is flexible to meet the special interests and varied backgrounds of students. Students have the choice of a thesis or a nonthesis program. Both require thirty (30) semester hours. The specific program of study will be developed by the student and a major professor, but the program must include fourteen (14) hours of social science education credit. The other credits will be taken in a field of concentration, such as an academic discipline. For successful completion of the specialist degree, students must earn a minimum 3.0 GPA and perform satisfactorily on the comprehensive examination and thesis defense. Only six (6) hours of 4000 level work may be counted toward the degree. Only six (6) semester hours may be transferred for the degree. Twenty-one (21) semester hours must be taken with a letter grade. Only nine (9) semester hours of special student work may be used toward the degree.

Graduate-Level Teacher Certification

Students who have completed a bachelor's degree in an appropriate field may also seek certification only in conjunction with course work toward a graduate degree. In meeting requirements for certification, these students should enroll in graduate-level professional courses.

Master's and specialist in education students may seek teacher certification in social science education, grades 6–12, as a part of their graduate study. These students must complete SSE 5366, 5367, and 5665 with a minimum grade of "B" during the fall semester and complete three (3) semester hours in educational psychology and three (3) semester hours in the social-philosophical foundations of education and TSL 5325, prior to entrance into the 15-week, 10-hour graduate internship (SSE 5947) during the spring semester. In addition, by the end of their program, certification students must have a minimum of fifty-one (51) college-university semester hours credit in history and social science, including three (3) semester hours each in sociology and anthropology, and six (6) semester hours each in American government, American history, geography, and economics. Some of these hours may be taken at the graduate level as part of the master's or specialist degree program. For successful completion, students must maintain a minimum 3.0 GPA and achieve better than satisfactory evaluation during the student teaching internship, which includes passing scores on both parts of the Florida Teachers Certification Examination (FTCE).

Doctoral Degrees

For admission to the doctor of philosophy and doctor of education degree programs, applicants must have a master's degree from an accredited institution, a successful academic background in an appropriate social science or humanities discipline, a minimum 1000 GRE score, successful academic and/or work experience in an appropriate educational activity, and the approval of the graduate faculty. During the first semester, students will take a diagnostic examination. Every year, their progress will be evaluated by the major professor and supervisory committee.

For completion of the program, students must fulfill twenty-four (24) semester hours in the 12-month residency requirement. Students must successfully complete EDF 5400, 5481, and a graduate research/methodology course in a social science or humanities discipline. Students must also successfully complete two social science doctoral seminars (SSE): 1) history of social studies/social science education and 2) research in social studies/social science education. In addition, students must pass a comprehensive examination covering their program of studies and successfully defend their dissertation before a graduate supervisory committee.

Admissions

Students from the United States 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
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 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 (9) 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 (9) 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 (12) semester hours.

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 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 (6) 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 (6) 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 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 5615. Problems in Teaching Elementary School Social Studies (3). The identification of problems, their investigation, and application of findings to 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 5907r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

SSE 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

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 (5) semester hours. A maximum of three (3) 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 (6) semester hours of credit is required.

SSE 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) A minimum of six (6) 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).

SSE 8966r. Master's Comprehensive Examination (0).

SSE 8968r. Specialist in Education Comprehensive Examination (0).

SSE 8976r. Master's Thesis Defense (0).

SSE 8978r. Specialist in Education Thesis Defense (0).

SSE 8985r. Dissertation Defense (0).

Department of MODERN LANGUAGES AND LINGUISTICS

College of Arts and Sciences

Chair: Mark F. Pietralunga; *Professors:* Carrabino, Cloonan, Darst, Fernandez, Fleming, Gerato, Launer, LeBlanc, Leparulo, Pietralunga, Ree, Ruppert, Spacagna, Stanley, Walters; *Associate Professors:* Adolph, Allaire, Arias, Cappuccio, Efimov, Galeano, Graham-Jones, Hilary, Rehder; *Assistant Professors:* Arias, Boutin, Gomáriz, Lan, Leushuis, Maier-Katkin, Mitchell, Pichugin, Poey, Romanchuk, Trinch; *Associates in Modern Languages:* Adolph, Stepp-Greany; *Assistant in Modern Languages:* Fiori-Agoren

The Department of Modern Languages and Linguistics has been offering graduate work in French and Spanish since 1917, with the first master's degree a combined master's in French and Spanish. In 1931 this degree program was separated and a master's was then awarded either in French or Spanish with the possibility of presenting the other language as a minor. 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. A concentration in Italian is also available for the MA in humanities. Programs leading to the PhD degree are offered with French or Spanish as the major field of concentration. Concentrations in linguistics, comparative and world literature, Italian, German, and Russian are available for the doctorate in humanities.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Special Requirements for the Master of Arts in French, German, Italian Studies, Russian (Slavic), or Spanish

For the master's degree, candidates follow the thesis-type or the course-type, nonthesis degree program. The comprehensive written examination will cover the courses studied, as well as the departmental reading list in the major field, and the course work of the minor field if one is presented, and may culminate in an oral examination at the discretion of the examining committee. All master's students are required to take FRE, GER, ITA, RUS, SPN 6925r, Tutorial in Professional Issues, in the student's appropriate program of study.

General course requirements include a proseminar (one [1] semester hour), a course in Old French (three [3] semester hours) and one course in each of the following six fields (three [3] semester hours each; total of eighteen [18] semester hours): the Middle Ages; and one course each on the 16th, 17th, 18th, 19th, and 20th centuries. The total number of general course requirement semester hours is twenty-two (22) hours. This allows for a minimum of nine (9) semester hours of electives; these electives may be applied toward a minor in another field.

To receive the MA in French Literature the student must complete a series of comprehensive examinations, a twenty to thirty (20-30) page research paper and a minimum of thirty-two (32) hours in graduate coursework, including a minor, if any. At least twenty-one (21) semester hours must be taken for a letter grade. All requirements for the MA degree must be completed within seven (7) years from the time the student first enrolled in the graduate program.

After the written examination, any member of the committee who wishes may request an oral examination in which all members of the committee participate. The committee may pass the student, recommending that the student be allowed to continue towards the PhD; that the degree be declared a terminal degree for the student in the French division; or that the student must repeat one or two areas, or that the student has failed the examination. The thesis program will have, in addition to the above examination, an oral defense of thesis.

Special Requirements for the Doctoral Program in French or Spanish

1. The program for the degree of PhD in French or Spanish may include a minor, usually in another foreign language or literature, linguistics, education, classics, English, history, humanities, philosophy, religion, etc. If a second minor is elected, it must also be in a closely related field;

2. Approximately one-fourth of the course work will be in the minor field or fields, if chosen;

3. The written and oral comprehensive examination will include both the major and minor fields; for the French PhD Examination, as the candidate is expected to demonstrate sophistication and expertise in the ability to investigate, analyze, synthesize, interpret, criticize, apply, compare, and expound, the French comprehensive (preliminary) examination will consist of one general essay (out of a choice of topics crossing movement or century lines) and two essays (out of a choice) on each of the following areas: medieval and 16th, 17th, 18th, 19th, and 20th centuries; and/or Black literature of French expression and/or Quebec literature with the option of dropping one area. If a minor is elected, that area will be examined in addition to the above. (If students elect more than one minor area, each area will be examined.) Students in the language and linguistics concentration for preliminary examinations will prepare five exams, at least one exam in each of the following ares: second language acquisition; sociolinguistics/

pragmatics; and general linguistic theory. Students pursuing a minor in French/Francophone literature may take up two of their exams in literature, as described above;

4. **For French PhD students only:** Residence of at least three months in a French-speaking country is required as appropriate to the doctoral candidate, unless exempted by the supervisory committee;

5. **For French PhD students only:** Students who pursue the second language acquisition concentration will complete the requirements below including the following subject matter courses (two each, one of which may be counted from MA work): AREA I: Literature (a minimum of three periods, two courses in each period [including MA]); AREA II: Linguistics (a minimum of two courses [including MA]); AREA III: Second Language Acquisition and Instruction (a minimum of two courses [including MA]); AREA IV: Psychology of Language (a minimum of two courses [including MA]). Other requirements in the second language acquisition concentration include: 1) one course in basic descriptive and inferential statistics applications (including MA); 2) one course in higher education or multilingual, multicultural education (including MA); 3) one course in Old French (including MA) as part of French division requirements; and 4) electives approved by student's committee.

6. The student must demonstrate adequate aural comprehension and oral fluency in French or Spanish, whichever is appropriate; and

7. The candidate must demonstrate either (for French PhD candidates only) high-level proficiency in one foreign language or (for French or Spanish PhD candidates) reading proficiency in two. The language or languages chosen must be pertinent to the student's program of research and be approved by the supervisory committee. Nonanglophone students may not choose English as a foreign language.

Definition of Prefixes

CHI — Chinese Language
CZE — Czech Language
FOL — Foreign and Biblical Languages
FRE — French Language
FOW — Foreign Writings
FRW — French Literature (Writings)
GER — German Language
GET — German Literature in Translation
GEW — German Literature (Writings)
ITA — Italian Language
ITW — Italian Literature (Writings)
JPN — Japanese Language
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 Language
SPN — Spanish Language
SPW — Spanish Literature (Writings)

Graduate Courses

FOL 5934r. Problems and Studies in Modern Languages and Literature (3). May be repeated for a maximum of nine (9) semester hours.

FOL 6735. Romance Linguistics (3). A comparative linguistic study of the Romance languages.

FOW 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's permission required. For French and Spanish doctoral students who have completed course requirements. May be repeated to a maximum of nine (9) 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's 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 (6) 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: Permission of instructor. 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 (6) semester hours.

CHI 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

CHI 5910r. Supervised Research in Chinese (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

CHI 5940r. Teaching Practicum (0–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

Czech

Advanced Undergraduate Courses

Note: graduate students must obtain permission of the Slavic coordinator and associate chair for graduate studies to take this course for credit.

CZE 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 (6) semester hours.

Graduate Courses

CZE 5914r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) 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 4500.* French Culture and Civilization (3). Prerequisite: FRE 3420 or permission of divisional coordinator. A foundation course in the history of ideas, the development of sciences and technology, and the evolution of the arts in France with special emphasis on the post World War II years.

FRE 4780.* Phonetics: Theoretical and Applied (3). Prerequisite: FRE 3421 or equivalent. Study of the International Phonetic Alphabet and its application to French with practice in reproducing accurately French sounds and intonation patterns.

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 (6) 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 (9) semester hours.

French Literature (Writings)

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 4770.* Black Literature of French Expression (3). Prerequisites: FRW 3100, 3101. An examination of the literature of Africa and the Caribbean written in French with an emphasis on Negritude.

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 Language

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 5069. 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 5505. French Culture and Civilization (3). This course spans the two world wars. It concentrates on the institutions of the Fifth Republic, the evolution of ideas since May 1968, the development of sciences and technology and the artistic movements since the end of World War II. It also emphasizes the role of France in the European Community. Graduate students must write a research paper on a chosen topic.

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 5855. Structure of Modern French (Graduate) (3). Prerequisite: A course in French phonetics or permission of instructor. Systematic study of the phonology, morphology, and syntax of modern French.

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 (9) semester hours.

FRE 5940r. Teaching Practicum (0–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

FRE 6925r. Tutorial in Professional Issues (0–2). (S/U grade only.) Prerequisite: FRE 5940 or permission of instructor. An advanced professional preparation course to acquaint students with issues in their academic discipline. A maximum of three (3) semester hours may count towards the degree. May repeated to a maximum of nine (9) semester hours.

French Literature in Translation

FRT 5555. Immigration and National Identity in France (3). This interdisciplinary course examines the ways in which immigration and ethnicity have been reshaping the contours of contemporary French society and culture. It is taught in English.

French Literature (Writing)

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 5348. Critical History of French Poetry: Origins to Baudelaire (3). Prerequisites: a full survey of French literature or permission of instructor. Deals with versification, rhetoric, schools, genres, and criticism of French poetry from medieval origins to mid-19th century through analysis of selected poems and arts poetiques.

FRW 5355. Contemporary French Poetry (3). Traces major poets and poetic theories, starting with Baudelaire and Symbolism to the present day.

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 (6) 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 (6) 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 (6) 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 (6) 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 (6) semester hours as content varies.

FRW 5597r. Studies in Naturalism and/or Symbolism: Figure or Movement (3). Studies in the literary movements of the 1870–1910 generation, including: the Goncourt, Zola, Maupassant, Huysmans, Verlaine, Mallarme, Rimbaud, Valery.

FRW 5598r. Studies in 20th-Century Pre-War (1900–1940) French Literature: Figure or Movement and/or Genre (3). May be repeated to a maximum of six (6) semester hours.

FRW 5599r. Studies in 20th-Century Post-War (1940 to the present) French Literature: Figure or Movement and/or Genre (3). May be repeated to a maximum of six (6) semester hours.

FRW 5605r. Rabelais and Montaigne (3). A study of the Gargantua, Pantagruel, selections from the Tiers Livre, Quart Livre, and Cinquieme Livre, and representative essays from Book I, II, and III of Montaignes Essais. May be repeated to a maximum of six (6) semester hours.

FRW 5745. French Literature of Quebec (3). A treatment of the major works (novel, theater, poetry) of the literature of 19th- and 20th-century Quebec.

FRW 5775r. Black Literature of French Expression (3). An examination of the literature of Africa and the Caribbean written in French with an emphasis on Negritude.

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 (9) semester hours.

FRW 5910r. Supervised Research in French (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

FRW 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

FRW 6829r. Seminar in Literary Criticism (3). Presentation, discussion, and illustration of one of several critical methodologies (with major emphasis on contemporary theory) including: historical, Marxist, psychological, mythological, phenomenological, structuralist, feminist, etc. May be repeated to a maximum of six (6) semester hours.

FRW 6938r. Graduate Seminar in French Literature (3). May be repeated to a maximum of nine (9) semester hours.

FRW 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours is required for the PhD.

FRW 8964r. Preliminary Doctoral Examination (0).

FRW 8966r. Master's Comprehensive Examination (0).

FRW 8976. Master's Thesis Defense (0).

FRW 8985r. Dissertation Defense (0).

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 consent of instructor. 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 (6) semester hours.

GET 4800.* Translation German-English/English-German (3). Prerequisite: GER 3400 or consent of instructor. 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 (6) 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 (6) 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 (9) 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 (9) 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 5069. 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 vari-

ous 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 (9) semester hours.

GER 5940r. Teaching Practicum (0–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

GER 6925r. Tutorial in Professional Issues (0–2). (S/U grade only.) Prerequisite: GER 5940 or permission of instructor. Course offers advanced professional preparation to acquaint students with issues of concern in their academic discipline. A maximum of three (3) hours may count towards the degree. May be repeated to a maximum of nine (9) semester hours.

German Literature (Writings)

GEW 5208r. Studies in a Genre (3). Study of German literature through generic approaches.

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 (6) 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 (6) semester hours.

GEW 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

GEW 5915r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

GEW 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

GEW 8966r. Master's Comprehensive Examination (0).

GEW 8976r. Master's Thesis Defense (0).

German Literature in Translation

GET 5135. German Literature in Translation (3).

GET 5295r.* 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 (6) 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 (6) 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 (6) 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 (9) semester hours.

ITA 4935r. Honors Work (3). May be repeated to a maximum of nine (9) 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 (6) 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 Vigano.

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 5069. 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 (9) 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 (9) 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 (9) semester hours.

ITA 5940r. Teaching Practicum (0–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

ITA 6925r. Tutorial in Professional Issues (0–2). (S/U grade only.) Prerequisite: ITA 5940 or permission of instructor. An advanced professional preparation course to acquaint students with issues in their academic discipline. A maximum of three (3) semester hours may count towards the degree. May be repeated to a maximum of nine (9) semester hours.

ITA 8966. Master's Comprehensive Exam (0). (S/U 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 (6) 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 (9) 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 Vigano. May be repeated to a maximum of nine (9) 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 (9) semester hours.

ITW 5905r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

ITW 5910r. Supervised Research in Italian (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) 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 (6) 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 (9) 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 (9) semester hours.

JPN 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

JPN 5915r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

JPN 5940r. Teaching Practicum (0–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) 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 (6) semester hours.

LIN 4930. 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 5772. Computational Linguistics (3). Programming the computer for research involving human language in such areas as theoretical and applied linguistics, literary analysis, and content analysis.

LIN 5908r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

LIN 5910r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

LIN 5932. 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.

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 (6) 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 (9) semester hours.

Graduate Courses

POR 5069. 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 (9) semester hours.

POR 5940r. Teaching Practicum (0–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

POW 5905r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

POW 5910r. Supervised Research in Portuguese (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) 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 consent of instructor. 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 (6) semester hours.

RUS 4930r. Special Topics (3). May be repeated to a total of twelve (12) semester hours.

RUS 4935r. Honors Work (3). May be repeated to a maximum of six (6) semester hours, three (3) 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 Povest (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 (9) semester hours.

Graduate Courses

Russian Language

RUS 5060r. Graduate Reading Knowledge in Russian (3). (S/U grade only.) Designed to present structures of the Russian language and vocabulary to prepare graduate students majoring in other disciplines to read learned journals, books, and monographs written in Russian useful to the student's research in humanities, natural or social sciences. May be repeated to a maximum of nine (9) semester hours.

RUS 5069. 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 (6) hours. Not open to native speakers of Russian.

RUS 5455r. Russian Stylistics (3). Advanced study of language elements that differentiate style. May be repeated as topics vary.

RUS 5705. Structure of Modern Language (3). Prerequisites: RUS 4410 and 4421; or equivalent. Advanced study of the verbal system and case grammar.

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 (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

RUS 6925r. Tutorial in Professional Issues (0–2). (S/U grade only.) Prerequisite: RUS 5940 or permission of instructor. An advanced professional preparation course to acquaint students with issues in their academic discipline. A maximum of three (3) semester hours may count towards the degree. Course may repeated to a maximum of nine (9) 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 5405. Old Russian Literature (3). Prerequisite: RUS 4410 or 4421. Study of the development of literature from the 11th through the 17th century, the major writers, and their representative works.

RUW 5445. Russian 18th-Century Literature (3). Study of the development of poetics, Classicism, Romanticism, the secularization of literature, 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 (9) 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 (9) semester hours.

RUW 5910r. Supervised Research in Russian (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

RUW 5930r. Special Topics (3). May be repeated to a maximum of nine (9) 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 (6) semester hours.

Graduate Courses

SEC 5900r. Studies in Serbo-Croatian Language and Literature (3). May be repeated to a maximum of nine (9) semester hours.

SEC 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

SEC 5910r. Supervised Research in Serbo-Croatian (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) 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 (6) semester hours.

Graduate Courses

SLL 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

SLL 5915r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

SLL 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

SLL 8966r. Master's Comprehensive Examination (0).

SLL 8976. Master's Thesis Defense (0).

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 (6) 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 (6) semester hours.

SPN 4935r. Honors Work (3). May be repeated to a maximum of six (6) semester hours, three (3) 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 (6) 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 (6) semester hours.

Graduate Courses

Spanish Language

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 (9) hours.

SPN 5069. 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 5855. Advanced Spanish Grammar and Composition (3). Upgrades the student's knowledge and application of Spanish grammar in the areas of speaking, writing and teaching.

SPN 5900r. Studies in Hispanic Language and Literature (3). May be repeated to a maximum of nine (9) semester hours.

SPN 5940r. Teaching Practicum (0–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

SPN 6925r. Tutorial in Professional Issues (0–2).(S/U grade only.) Prerequisite: SPN 5940 or permission of instructor. An advanced professional preparation course to acquaint students with issues in their academic discipline. A maximum of three (3) semester hours may count towards the degree. May repeated to a maximum of nine (9) semester hours.

Spanish Literature (Writings)

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 5269. Spanish 19th-Century Novel (3). Readings of representative works of Alarcón Galdós, Pardo-Bazán and others. Emphasis on textual analysis, and literary and social trends of the nineteenth century.

SPW 5275. Spanish 20th-Century Novel (3). Spanish novel from the Generation of 1898 through the Post Civil War period.

SPW 5315. Spanish Golden Age Theatre (3). Reading and discussion of representative comedias from Spain's Golden Age.

SPW 5325. 20th-Century Spanish Drama (3). A study of literary and representational trends in modern Spanish theater. Plays of Valle-Inclán, Lorca, Buero Vallejo, and other leading figures.

SPW 5337. Spanish Poetry to 1700 (3). An intensive survey of Spain's lyric poetry from the Jarchas through Góngora and Quevedo.

SPW 5338. 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.

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 neorealism, 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 5497. 20th-Century Spanish American Drama (3). A study of literary, presentational, and theoretical trends in contemporary Spanish American Theater.

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 (9) semester hours.

SPW 5910r. Supervised Research in Spanish (1–5). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

SPW 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) 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 (9) 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 (6) semester hours.

SPW 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours is required for the PhD.

SPW 8964r. Preliminary Doctoral Examination (0).

SPW 8966r. Master's Comprehensive Examination (0).

SPW 8976. Master's Thesis Defense (0). (S/U grade only.)

SPW 8985r. Dissertation Defense (0).

MOLECULAR BIOLOGY
see Biological Science

Program in MOLECULAR BIOPHYSICS

College of Arts and Sciences

Program Committee: Bryant Chase, Nancy Greenbaum, Tim Logan, Randy Rill, Ken Roux

Molecular biophysics involves the application of the principles and techniques of chemistry and physics 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 an interaction between disciplines that have been traditionally divided into separate departments. To foster the development of a fully integrated research 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, postdoctoral fellows, and faculty formally associated with different departments share expertise and lab space. It is within this unique environment that the graduate program in molecular biophysics is centered.

The program enlists the resources of its associated departments to offer an interdisciplinary core of studies leading to the doctor of philosophy degree in molecular biophysics. No master's degree is offered. 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. 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. Research facilities available for the development of the graduate thesis include those located in the Institute of Molecular Biophysics, the departments of Biological Science, Chemistry and Biochemistry and Physics, and the National High Magnetic Field Laboratory.

Admission

Application for admission is to be made directly to the Program Coordinator. The admissions committee will consider all applicants with a strong background in any physical or biological science, or mathematics, 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) for the past two years, a combined score of 1100 on the verbal and quantitative sections of the Graduate Record Examinations (GRE), three current letters of recommendation from individuals who are able to assess the applicants academic and research potential, and official transcripts. International students must also score a minimum of 600 on the Test of English as a Foreign Language (TOEFL). Applicants are required to advise the admissions committee of their areas of interest so that applications can be circulated to the appropriate faculty members.

Financial Aid

Acceptance into the program is not usually granted without guaranteed financial aid, and graduate assistantships, health insurance subsidy and tuition waivers are normally awarded to all students. Additional support of up to $2000 per student is available over the first two years to enable students to attend national meetings. Travel money is also available for advanced students presenting research at such meetings.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Doctoral Degree Requirements

The direction and supervision of graduate work at the doctoral level resides primarily with the major professor (thesis advisor) and the supervisory committee. The University requires that the degree be completed within five calendar years from the time the student gains admittance to candidacy by passing the preliminary exam.

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 (24) semester hours of dissertation credit is required;

3. Teach at least one semester in the Department of Biological Science or the Department of Chemistry and Biochemistry;

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)
CHM	6590r	Physical Chemistry Seminar (1)
PCB	6936r	Seminar in Genetics and Cell Biology (2)
PCB	6937r	Seminar in Physiology (2)
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; and

7. Submit, publicly present, and successfully defend a dissertation.

Course Requirements

1. Since students with very different backgrounds in biological or physical sciences may be admitted to the program, some may need to take additional courses to provide an adequate background for graduate training in molecular biophysics. Specifically, students are required to have a minimum of one (1) semester of biochemistry and physical chemistry. This requirement may be met by taking the appropriate courses at The 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 six weeks. Credit for the rotations is obtained by registering for the following course during the first year:

MOB	5905r	Directed Individual Study (1–12) [rotation];

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)
PCB	5595	Advanced Molecular Biology (3) [same as BCH 5405];

4. An additional nine (9) semester hours is selected from the following courses to complete the course requirements:

BCH	5886r	Special Topics in Biochemistry and Cell Biology (1–3) [same as BCH 5887r]
BMS	6706r	Clinical Neuroscience (7)
BMS	6511	Organ Physiology II (4)
CHM	5151	Optical Methods of Chemical Analysis (3)
CHM	5153	Electrochemistry (3)CHM 5154 Chemical Separations (3)
CHM	5225	Advanced Organic Chemistry-Structure (3)
CHM	5226	Advanced Organic Chemistry-Reactions (3)
CHM	5245	Physical Organic Chemistry (3)
CHM	5250	Advanced Organic Synthesis (3)
CHM	5454	Polymer Characterization (3)
CHM	5460	Thermodynamics and Statistical Mechanics (3)
CHM	5461	Advanced Statistical Mechanics (3)
CHM	5470	Valence Theory (3)
CHM	5480	Quantum Mechanics (3)
CHM	5481	Advanced Quantum Mechanics (3)
CHM	5580r	Special Topics in Physical Chemistry (1–3)
CHM	5581r	Special Topics in Physical Chemistry (1–3)
MCB	5505	Virology (3)
PCB	4233	Immunology (3)
PCB	4723	General and Comparative Animal Physiology (3)
PCB	5795	Sensory Physiology (3)
PCB	5835	Neurophysiology (3)
PCB	5846	Neurocytology and Neurochemistry (4)
PCB	5936	Selected Topics in Genetics and Cell Biology (1–4)
PCB	6155C	Microscopy and Electron Microscopy for the Biologist (3)

Note: other courses may be substituted for those in this list at the approval of the Program Committee.

Definition of Prefix

MOB — Molecular Biophysics

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 (50) semester hours.

MOB 5915r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

MOB 6935r. Advanced Specialized Molecular Biophysics (3). May be repeated to a maximum of twenty-four (24) semester hours.

MOB 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours of credit must be earned.

MOB 8964r. Preliminary Doctoral Examination (0). A comprehensive examination. Passing exam required for admission to doctoral candidacy.

MOB 8965r. Thesis Prospectus Defense (0). (S/U 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).

MOTION PICTURE, TELEVISION, AND RECORDING ARTS

School of Motion Picture, Television, and Recording Arts

Dean: Frank Patterson; *Director:* Reb Braddock; *Associate Professor:* Richard; *Filmmakers in Residence:* Allen, Chase, Fernandez, Holland, Kaleko, Kiefer, Lottimer, Portman, Portorreal, Ruben; *Distinguished Visiting Filmmaker At Large:* A.C. Lyles; *Screenwriters in Residence:* Johnson, Long; *Visiting Assistants:* Bradburn, Ellison

The master of fine arts (MFA) is a graduate program in narrative filmmaking that prepares students for careers in producing, directing, screenwriting, production design, cinematography, sound design, and editing. The purpose of this curriculum is 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 School of Motion Picture, Television, and Recording Arts (the Film School) are to fully educate students, help them become integrated members of the academic community of The Florida State University, become responsible members of the entertainment profession, and participants in a creative and artistic process.

Faculty Distinctions

The Film School has a strong commitment to hiring experienced, working professionals who have both teaching skills and professional goals. The Film School's full-time faculty is comprised of working film makers with various specializations as writers, directors, producers, cinematographers, audio designers, production designers and editors in both the theatrical and nontheatrical 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 master of fine arts program operates extensive film-production facilities for its graduate and undergraduate programs in the University Center building on The Florida State University campus in Tallahassee. 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 videodisc, videotape and DVD, a large production research library, and eleven editing rooms, of which three are digital, non-linear editing suites for picture and sound. Production facilities are available for both 16mm and 35mm production.

MFA Program

The goals of this professional degree are:

1. To ground students in the history, theory, and practice of narrative filmmaking;

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; and

4. To provide interaction with a wide range of film and video industry professionals in order to provide information on the most recent trends and processes in the film/video business.

To these ends the school's approach emphasizes three kinds of learning experiences: 1) course work in history, theory, style, technology, and techniques; 2) seminars in specific skill areas conducted by active professionals; and 3) independent production projects. Students work in production teams on narrative films. These films are written, produced, directed, shot, recorded, and edited by Film School students. In addition, the students wrestle with the financial, legal, distribution, and exhibition sides of the film/video business.

The program is designed and scheduled to provide training of the highest quality. It is meant to create a flexible and disciplined atmosphere where individuals can hone their talents, develop a body of work, and sharpen their capacities to work in teams.

Financing and Ownership of Student Films

The Film School pays for all student laboratory, workshop and thesis film 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 Film School has an agreement with the Screen Actors Guild of America whereby SAG performers may work on graduate student films 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 Film School students become the property of The Florida State University and are copyrighted in the name of The 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 The Florida State University (currently 50/50) between the Film School 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. Screenplays, scripts, and story ideas that are proposed and incorporated by students into their workshop or thesis films, however, become the property of The 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 the Film School sign a statement acknowledging their receipt and understanding of the rule prior to official admission and enrollment.

Admission

This is a limited enrollment program and, therefore, admission is selective. A student seeking admission to the MFA program must meet the admission policies of the University for graduate studies and must offer evidence of a high degree of creative ability in their area of specialization. All applicants must submit a 500 to 1000 word essay describing their backgrounds, artistic experiences, creative influences, personal objectives, and future career goals, and also take the Graduate Record Examinations (GRE). Application deadline for the graduate program is December 15th for consideration for Fall admission. Complete information on admission is available from the School of Motion Picture, Television, and Recording Arts website at *http://filmschool.fsu.edu.*

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 (90) semester hours and should be completed in six full-time consecutive semesters.

Retention and Evaluation

All students must meet the University's minimum retention standards for graduate studies. Additionally, continuation in the graduate film 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. Two undocumented absences per class are permitted for all students. Approval of other 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 Film School 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 Film School 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 the second and third semesters. 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

Please refer to the 'Assistantships' section in the "School of Motion Picture, Television, and Recording Arts" chapter for information concerning graduate assistantships.

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 Film School requires that majors present proof of health and accident insurance (copy of policy showing the student as covered) prior to registration in the fall semester each year. Students are expected to maintain this insurance throughout their enrollment in the Film School. Registration will be administratively canceled at the end of the second week of classes for any students failing to provide proof of insurance.

Definition of Prefix

FIL — Film

Graduate Courses

FIL 5005. Introduction to the Motion Picture, Television, and Recording Arts Industry (6). Prerequisite: MFA admission. Comprehensive overview of the production, distribution, and exhibition of motion pictures and television programming.

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 15 page script. Will analyze narrative problems in preparation for a rewrite. Through workshops, redeveloping,

and then rewriting a 15 page thesis script, the student will gain a better understanding as to how to make a story idea more compelling through rewriting.

FIL 5158. Screenwriting IV: Television Workshop (3). Prerequisite: FIL 5157. To produce a full-length television episode for a specific series for the established characters and settings.

FIL 5159. Screenwriting V: Motion Picture Workshop (3). Prerequisite: FIL 5158. Writing feature-length film scripts fusing the dramatic elements and skills developed in prior courses.

FIL 5209L. 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 edition 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 (18) semester hours.

FIL 5215L. Producing 1 (2). Corequisite: FIL 5267. Provides an overview of film production management, with emphasis on the breakdown, scheduling, budgeting and preparation of short films.

FIL 5216L. Producing 2 (2). Prerequisite: FIL 5215L. Training and practice in the development of business structure for the purpace of producing motion pictures.

FIL 5217r. 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 (15) semester hours.

FIL 5218r. 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 (6) semester hours.

FIL 5219. Practicum in Technical Support (3). Prerequisites: FIL 5209Lr, 5218r. Comprehensive practical training for first-year students in below-the-line production and postproduction skills, including the work of the assistant cameraperson, grip, gaffer, sound mixer, boom, sound engineer, assistant editor, and various others. Training is concurrent with students below-the-line crew work on MFA thesis projects.

FIL 5256L. Sound Workshop (2). Prerequisite: FIL 5005. Corequisites: FIL 5255, 5257r. This course provides a basic working understanding of sound recording of sound recording and the various stages of production and post-production.

FIL 5257L. 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 (6) credit hours.

FIL 5258. Production Design Workshop (3). Prerequisites: FIL 5256, 5257r. Overview of production design principles and practices used in the creation of sets, costumes, props, makeup, and special effects for motion pictures and television.

FIL 5259L. Post-production Sound Workshop (2). Prerequisites: FIL 5256L, 5209Lr. This course will provide an understanding of digital sound recording, sound mixing, and the various stages of sound post-production.

FIL 5265L. Directing Actors (2). Corequisite: FIL 5209Lr. 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 5266r. Directing: Multicamera Workshop (3–9). Prerequisite: FIL 5265r. The study, development, and direction of multicamera television productions. May be repeated to a maximum of nine (9) semester hours.

FIL 5267L. Directing: Single-Camera Workshop (2). Prerequisite: FIL 5265L. 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 (6) semester hours.

FIL 5268L. Advanced Directing (2). Prerequisite: FIL 5267L. Through lectures, discussions, and practical exercises students will analyze various visual techniques employed by directors in motion picture production.

FIL 5278L. Camera and Light Mechanics (2–6). Corequisite: FIL 5209Lr. 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 (6) semester hours.

FIL 5279L. Lighting Workshop (2–6). Prerequisite: FIL 5278L. Explores the more complex aspects of cinematography beyond the basics; provides support, guidance and criticism for cinematography performed on Production 3 film projects.

FIL 5285. Intermediate Television Editing (3). Prerequisite: FIL 5218r. 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 5286. Advanced Television Editing (3). Prerequisite: FIL 5285. Students will develop an understanding of and skill with various computer-controlled editing systems from personal computers to Sony 910 computer controller.

FIL 5295. Acting for the Camera (3). Prerequisite: FIL 5265r. 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 5296. Advanced Sound (2–6). Prerequisite: FIL 5259L. Advanced knowledge of production and post-production sound recording through the recording, sound editing and re-recording of Production-3 film projects.

FIL 5415. History and Criticism I (3). Historical survey of the film medium worldwide, from its invention to the modern era.

FIL 5416. History and Criticism II (3). Prerequisite: FIL 5415. Survey of theories and movements in motion picture history.

FIL 5505r. 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 (9) semester hours.

FIL 5506. Critical Methods in Motion Picture, Television, and Recording Arts (3). Principles and practices of writing film/video criticism.

FIL 5508. Critical Methods of Film Analysis (3). Prerequisite: FIL 5219. 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 5509r. 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 (4) semester hours.

FIL 5606. Distribution and Financing Workshop (3). Corequisite: FIL 5605r. 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 5609. Computer Applications Workshop (3). Corequisites: FIL 5259, 5608. Computer applications for all phases of the motion picture and television industry.

FIL 5615L. 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 (15) semester hours.

FIL 5616r. Preproduction and Production Planning (3–12). Prerequisite: FIL 5975. 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 (12) semester hours. May be repeated during the same semester.

FIL 5617L. Advanced Editing (2–6). Prerequisite: FIL 5257L. 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 5705Lr. 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 (6) semester hours.

FIL 5906r. Directed Individual Study (3–12). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours. May be repeated during the same semester.

FIL 5912r. Supervised Research or Creative Activity (3). (S/U grade only.) May be repeated; however no more than five (5) semester hours of FIL 5912r and FIL 5941r in combination may be applied toward graduation.

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 (6) 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. Five (5) semester hours are required for graduation. May be repeated to a maximum of six (6) 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 (12) semester hours. May be repeated during the same semester.

FIL 5941r. Supervised Teaching (3). (S/U grade only.) May be repeated; however, no more than five (5) semester hours of FIL 5941r and FIL 5912r in combination may be applied toward graduation.

FIL 5955r. Apprenticeship (3–12). (S/U grade only.) Professional on-the-job training in an area of specialization. May be repeated to a maximum of twelve (12) 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 (15) semester hours.

FIL 5964. MFA Qualifying Exam (0). (S/U 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). (S/U 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 (12) semester hours.

FIL 5976. Master's Thesis Defense (0). (S/U 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 (15) semester hours. May be repeated during the same semester.

FIL 5978. Defense of MFA Project (0). (S/U grade only.)

MUSIC

SCHOOL OF MUSIC

Professors: Beckman, Bridger, Capps, Chapo, Ciannella, Clarke, Corzine, Croft, Delp, Drew, Fowler, Gerber, Geringer, Goff, Harsanyi, Hoekman, Kite-Powell, Kosloski, Kowalsky, Kubik, Louwenaar, Madsen, L. Mastrogiacomo, Meighan, Ohlsson, D. Olsen, S. Olsen, Piersol, D. Seaton, Shellahamer, Spencer, Spurgeon, Standley, Streem, Thomas, Wright, Zwilich; *Associate Professors:* Allen, Andrews, Bakan, Bowers, Brewer, Buggs, Clendinning, Dunnigan, Ebbers, Fisher, Ford-Kronholz, Georgiev, Gregory, Holzman, Keesecker, Kennedy, Lata, Lipovetsky, Mathes, Peterson, Pope, Punter, Riordan, Roman, Ryan, Stebleton, D. Wingate; *Assistant Professors:* Anderson, Bish, Buchler, Callender, Fenton, Gaber, Jiménez, Jones, Jordan, Kelly, Newdome, Porter, Rogers, Shaftel, Trujillo, Van Weelden, Von Glahn, M. Wingate; *Visiting Assistant Professors:* Amsler, Beck, N. Mastrogiacomo, Ploumis-Devick, Semmes, Vinayak; *Program Directors:* Hodges, McArthur, G. Seaton; *Faculty Librarian:* Clark; *Assistant Librarian:* Markham

The graduate program of the School 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 school has a long and illustrious history of graduating outstanding performers, composers, scholars, educators, and therapists.

The following are the graduate degrees offered by the School of Music:

Master of arts in arts administration

Master of music
- Performance
- Accompanying
- Piano pedagogy
- Choral conducting
- Instrumental conducting
- Jazz studies
- Music theory
- Composition
- Musicology (both historical and ethnomusicology)
- Opera
- Music therapy

Master of music education

Doctor of philosophy in music education

Doctor of philosophy in music (specializations in historical musicology, ethnomusicology, and music theory)

Doctor of education in music education

Doctor of music in composition or in performance (piano, voice, violin, viola, violoncello, organ, double bass, guitar, flute, oboe, clarinet, bassoon, saxophone, trumpet, horn, trombone, tuba, percussion)

In addition to its degree programs, the School of Music offers a number of certificate programs that provide an additional specialized area of emphasis for graduate students. These include certificate programs in church music, jazz studies, piano pedagogy, piano technology, computers in music, early music, music of the Americas, world music, pedagogy of music theory, special music education, college teaching, and harpsichord and organ performance. A post-master's artist certificate in performance is available in opera, violin, viola, cello and piano. Further information about admission to and requirements of these programs is available from the graduate studies office of the School of Music.

For complete details of degree requirements, plus a description of the school, its facilities, opportunities, and available financial assistance, refer to the "School 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
MUN — Music: Ensembles
MUO — Music: Opera/Music Theatre
MUR — Music: Church Music
MUS — Music
MUT — Music: Theory
MUY — Music: Therapy
MVB — Music: Applied Brasses
MVH — Music: Applied Historical Instruments
MVJ — Music: Applied Jazz
MVK — Music: Applied Keyboard
MVO — Music: Applied Other Instruments
MVP — Music: Applied Percussion
MVS — Music: Applied Strings
MVV — Music: Applied Voice
MVW — Music: Applied Woodwinds

Graduate Courses

Composition

MUC 5110r. Composition (2). For non-composition majors only. May be repeated to a maximum of six (6) semester hours.

MUC 5251r. Composition (3). Prerequisite: Permission of composition faculty. For composition majors only. May be repeated to a maximum of six (6) semester hours.

MUC 5615r. Film Scoring (3). Prerequisite: Permission of instructor. Techniques of film scoring and review of application requirements. May be repeated to a maximum of six (6) semester hours.

MUC 5625r. Jazz Composition (3). Prerequisite: Permission of instructor. Techniques of creative jazz composition and literature. May be repeated to a maximum of six (6) semester hours.

MUC 6261r. Composition (3). Prerequisite: Permission of composition faculty. For composition majors only. May be repeated to a maximum of six (6) semester hours.

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 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: Consent of instructor.

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 consent of instructor. 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 consent of instructor. Techniques of teaching music to children in special education programs.

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 (2) 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.) Consent of instructor.

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 (6) 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 (6) 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 (6) semester hours.

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

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 HistoryGraduate Survey (2). A synoptic review of the history of music from Greek music to the present day.

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 5380. Music in the Humanities (3). Western music in historical perspective. For nonspecialists.

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 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 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 (6) 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 (6) semester hours.

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 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 (9) 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 (9) semester hours.

Music Literature

MUL 5375. Music Since World War II (3). Prerequisite: MUT 3571. Recent musical techniques and aesthetics as revealed in selected works.

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 consent of instructor. 5412: Baroque to Classic; 5413: Classic to Romantic; 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-Classic.

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 consent of instructor. 5445: Woodwinds; 5446: Brasses.

MUL 5456. Ensemble Literature for Wind and Percussion Instruments (3). Prerequisite: Graduate standing or consent of instructor. The study of literature for groups of four or more instruments in historical context, including analysis and live performance.

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 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 [2] hours each). Prerequisites: MUL 3604 or equivalent for 5624; MUL 4605 or equivalent for 5625; MUL 4608 or equivalent for 5626. Open to candidates for the master's and doctoral degrees in performance, or by consent of instructor. 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 5677. Seminar in Opera Literature: Monteverdi to the Present (2).

MUL 5678. Seminar in Opera Literature: The Music Dramas of Wagner (2).

MUL 5751. Pedagogy of Music Literature and Appreciation (2). Prerequisite: MUH 5219. Basic instruction and preparation in the teaching of music literature and music appreciation courses.

MUL 5852. The Music of W.A. Mozart (3). An examination of selected works, with special attention to form and style.

MUL 5854. The Music of Igor Stravinsky (3). Prerequisite: MUT 3571. Analysis of selected works.

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 (12) semester hours.

Commercial Music

MUM 5215. Applied Piano Tuning I (3). Prerequisite: Permission of instructor. This course examines string vibration as it relates to applied piano tuning.

MUM 5216. Applied Piano Tuning II (3). Prerequisite: MUM 5215. This course examines tuning and temperaments appropriate for historical instruments and for the modern piano.

MUM 5217. Applied Piano Tuning III (3). Prerequisite: MUM 5216. Continued development of tuning skills is examined.

MUM 5218. Applied Piano Tuning IV (3). Prerequisite: MUM 5217. This course developes tuning skills up to concert level, and prepares students for the Piano Technicians Guild tuning exam.

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 consent of instructor. Instruction in the fundamentals of upright and grand piano regulation, minor repairs, and practical tuning skills.

MUM 5256. Piano Technology I (3). Prerequisite: Permission of instructor. This course is an introduction to the history of the piano, fundamental principles of the mechanisms of the modern piano, and construction techniques.

MUM 5257. Piano Technology II (2). Prerequisite: MUM 5256. Projects include highlighting beginning restoration techniques and introduction to action regulation.

MUM 5258. Piano Technology III (3). Prerequisite: MUM 5257. Advanced repair and restoration techniques are examined.

MUM 5259. Piano Technology IV (3). Prerequisite: MUM 5258. Topics include major repairs, and advanced and cutting-edge action geometry.

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 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 (24) 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 (4) 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 (4) 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 (4) 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 (4) 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 (4) 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 (4) 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 (4) 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 (4) 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 (4) 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 (4) 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 (4) 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 (4) semester hours.

MUN 5345r. Chamber Chorus (0–1). Prerequisite: By audition. The study and performance of accompanied and a cappella works suitable for a 24–30 voice mixed chorus. May be repeated to a maximum of four (4) 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 (4) 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 (4) semester hours. Student has option to repeat during the same semester.

MUN 5415r. String Ensemble (0–1). Prerequisite: By audition and/or consent of instructor. The study and performance of works for string ensemble. May be repeated to a maximum of four (4) semester hours.

MUN 5425r. Woodwind Ensemble (0–1). Prerequisite: Permission of instructor. The study and performance of ensemble literature for woodwinds. May be repeated to a maximum of four (4) semester hours.

MUN 5435r. Brass Ensemble (0–1). Prerequisite: Permission of instructor. The study and performance of ensemble literature for brasses. May be repeated to a maximum of four (4) semester hours.

MUN 5445r. Percussion Ensemble (0–1). Prerequisite: Consent of instructor. The study and performance of ensemble literature for percussion. May be repeated to a maximum of four (4) semester hours.

MUN 5456r. Duo Piano (1). Prerequisite: Permission of instructor. The study and performance of duo-piano and piano duet literature. May be repeated to a maximum of four (4) semester hours.

MUN 5465r. Chamber Music (0–1). Prerequisite: Permission of instructor. The study and performance of vocal and/or instrumental ensemble literature. May be repeated to a maximum of four (4) semester hours.

MUN 5477r. Collegium Musicum (0–1). Prerequisite: Permission of instructor. 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 (4) semester hours.

MUN 5478r. Baroque Ensemble (0–1). Prerequisite: Consent of instructor. May be repeated to a maximum of four (4) semester hours.

MUN 5485r. Guitar Ensemble (0–1). Prerequisite: Permission of instructor. The study and performance of literature for guitar. May be repeated to a maximum of four (4) 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 (4) 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 (4) 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 (4) semester hours.

MUN 5806r. World Music Ensemble (0–1). Prerequisite: Permission of instructor. May be repeated to a maximum of four (4) 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 consent of instructor. 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 (4) semester hours.

MUO 5445r. Opera Coaching (1–2). Prerequisite: Consent of instructor. May be repeated to a maximum of eight (8) 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; consent of opera faculty. 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 (12) semester hours.

MUO 5605r. Opera Production (1). Prerequisite: Interview; consent of instructor. 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 (4) semester hours.

MUO 5701r. Opera Directing (2). Prerequisite: Interview; consent of instructor. 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 (6) 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: Consent of instructor. May be repeated to a maximum of eight (8) 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

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. Contemporary Media (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 (6) 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 5505. Seminar in Music Technology (2). Practical and theoretical issues in music technology: purchasing and evaluating computer music systems, music hardware and software issues, copyrights and ethics in technology, historical contexts, societal and educational issues, future directions in computers and music, and other issues.

MUS 5535. Beginning C Computer Programming Techniques for Musicians (3). Introduction to microcomputer-based interactive graphics programming in the C language, including the designing and implementation of music programs.

MUS 5536. Multimedia for Musicians (3). Prerequisite: MUS 3500 or 3540 or permission of instructor. 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 (6) 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 (6) semester hours.

MUS 5545. Electronics for Musicians (3). Prerequisite: MUS 5505. Basic concepts and practical experience in digital and analog electronics for musicians.

MUS 5546. Digital Music Synthesis I (3). Prerequisite: Permission of instructor. 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 5748. Writing for Musicians (2). Experience in types of writing that are particularly useful to musicians: analyses, program notes, performance reviews, and research.

MUS 5906r. Directed Individual Study (1–3). (S/U grade only.) Prerequisite: Consent of instructor. May be repeated to a maximum of nine (9) semester hours.

MUS 5910r. Supervised Research (1–3). (S/U grade only.) Open to all graduate students with consent of instructor. May be repeated to a maximum of three (3) 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 (6) 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 (6) 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 (2) semester hours.

MUS 5933r. Computer Music Project (1). Prerequisite: Permission of instructor, and students must first complete all courses in the Certificate in Computer Music Program (or equivalent). The development of computer-based hardware and/or software projects in music technology. May be repeated to a maximum of three (3) 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 (6) semester hours.

MUS 5939r. Special Topics in Music (1–3). Prerequisite: Consent of instructor. May be repeated to a maximum of nine (9) 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 (3) 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 (24) semester hours.

MUS 5971r. Thesis (1–6). (S/U grade only.) Prerequisite: Consent of instructor. Six (6) semester hours credit required.

MUS 5975. Graduate Project (2). (S/U grade only.) Prerequisites: Graduate standing and consent of instructor. Major scholarly and/or performance project.

MUS 6907r. Directed Individual Study (1–3). (S/U grade only.) Prerequisite: Consent of instructor. May be repeated for maximum credit of nine (9) semester hours.

MUS 6979r. Doctoral Treatise (1–12). (S/U grade only.) Prerequisite: Consent of instructor. For doctoral performance majors. May be repeated to a maximum of twenty-four (24) semester hours.

MUS 6980r. Dissertation (1–12). (S/U grade only.) Prerequisite: Consent of instructor.

MUS 8960r. Doctoral Diagnostic Examination (0). (S/U grade only.) Prerequisite: Consent of instructor. May be repeated one time only.

MUS 8964r. Doctoral Preliminary Examination (0). Prerequisite: Consent of instructor.

MUS 8965r. Doctoral Performance Comprehensive Examination (0). (S/U grade only.) Prerequisites: MUS 8964, consent of instructor.

MUS 8966r. Master's Comprehensive Examination (0). Prerequisite: Consent of instructor.

MUS 8976r. Master's Thesis Defense (0). Prerequisite: Consent of instructor.

MUS 8985r. Dissertation Defense (also used for Treatise Defense–Doctor of Music) (0). Prerequisite: Consent of instructor.

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 School 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 consent of instructor. A course designed to promote skills in arranging for the jazz ensemble.

MUT 5358. Jazz Theory/Arranging II (3). Prerequisite: MUT 5357 or consent of instructor. Advanced skills in arranging for the jazz ensemble.

MUT 5381. Composing and Arranging for Wind Band (3).

MUT 5445. Contrapuntal Genres (3). Sixteenth- to eighteenth-century contrapuntal genres, analysis, and writing skills. Credit earned in MUT 5445 does not apply to credit-hour requirements for any graduate degrees in the School of Music.

MUT 5587. Classic, Romantic, and 20th-Century Styles (3). Classic, Romantic, and twentieth-century styles, analysis, and writing skills. Credit earned in MUT 5587 does not apply to credit-hour requirements for any graduate degrees in the School of Music.

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 5625. Instrumental Forms (3). The evolution of the concerto and the symphony.

MUT 5627. Introduction to Schenkerian Analysis (3).

MUT 5628. Atonal Analysis (3). Techniques for the analysis of nonserial atonal music.

MUT 5646r. Jazz Improvisation I (1). Prerequisite: Music reading. Skills in beginning jazz improvisation. May be repeated to a maximum of three (3) semester hours.

MUT 5647r. Jazz Improvisation II (1). Prerequisite: MUT 5646 or consent of instructor. Advanced skills in jazz improvisation. May be repeated to a maximum of three (3) 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 (6) semester hours.

Music Therapy

MUY 5411. Music in Counseling (2). Techniques of using music in counseling juveniles and adults.

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 nonthesis 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 (2) semester hours.

MVV 5151r. Class Voice (1). Prerequisite: Permission of instructor. Class instruction. For dance and theatre majors. Fundamentals of voice production. May be repeated to a maximum of two (2) 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 (4) semester hours. Credit may be modified by electing MVO 5250r (1), All Instruments. All MVH courses may be taken for one to two (1–2) credit hours.

MVB 5251r. App Mus Sec, Trumpet

MVB 5252r. App Mus Sec, French Horn

MVB 5253r. App Mus Sec, Trombone

MVB 5254r. App Mus Sec, Baritone Horn

MVB 5255r. App Mus Sec, Tuba

MVH 5250r. App Mus Sec, Historical Instruments (1–2)

MVH 5251r. App Mus Sec, Cupped Mouthpieces (1–2)

MVH 5252r. App Mus Sec, Open Reeds (1–2)

MVH 5253r. App Mus Sec, Capped Reeds (1–2)

MVH 5254r. App Mus Sec, Recorder (1–2)

MVH 5255r. App Mus Sec, Flute (1–2)

MVH 5256r. App Mus Sec, Plucked Instruments (1–2)

MVH 5257r. App Mus Sec, Bowed Strings (1–2)

MVH 5258r. App Mus Sec, Voice (1–2)

MVH 5259r. App Mus Sec, Dulcimer, Portative Organ, Regal, Percussion (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 (12) 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 5352r. App Mus Prin, Violin, Jazz

MVJ 5353r. App Mus Prin, Guitar, Jazz

MVJ 5354r. App Mus Prin, Bass, Jazz

MVJ 5355r. App Mus Prin, Flute, 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 [4] hours each.) Private instruction. Major instrument. For performance majors. May be repeated to a maximum of twenty-four (24) semester hours. Credit may be modified by electing MVO 5450 (2), all instruments. Credit for MVV 5451r is for three (3) 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 5450r. App Mus Maj, Piano, Jazz

MVJ 5451r. App Mus Maj, Voice, Jazz

MVJ 5452r. App Mus Maj, Violin, Jazz

MVJ 5453r. App Mus Maj, Guitar, Jazz

MVJ 5454r. App Mus Maj, Bass, Jazz

MVJ 5455r. App Mus Maj, Flute, Jazz

MVJ 5456r. App Mus Maj, Saxophone, Jazz

MVJ 5457r. App Mus Maj, Trumpet, Jazz

MVJ 5458r. App Mus Maj, Trombone, Jazz

MVJ 5459r. App Mus Maj, Percussion, Jazz

MVK 5451r. App Mus Maj, Piano

MVK 5452r. App Mus Maj, Harpsichord

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: Permission of the instructor. May be repeated to a maximum of two (2) semester hours.

MVS 5550r. String Repertory (0–1). Required of string performance majors. May be repeated to a maximum of four (4) semester hours. May be repeated in the same semester.

MVV 5552r. Musical Theatre Repertoire (1). Prerequisite: Consent of instructor. For musical theatre majors. May be repeated to a maximum of four (4) semester hours.

MVS 5556r. Guitar Repertory (1). Prerequisite: Consent of instructor. Required of guitar performance majors. May be repeated to a maximum of four (4) semester hours.

MVK 5605. Organ/Harpsichord Pedagogy (2). Prerequisite: Consent of instructor. 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 consent of instructor. 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 (24) semester hours.

MVW 5705r. Introduction to the Baroque Flute (1). Prerequisite: Consent of instructor. 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 (4) semester hours.

MVW 5706r. Introduction to the Baroque Recorder (1). Prerequisite: Consent of instructor. 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 (4) 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 (24) 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 (24) 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 (8) 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 ChamberMusic (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: Consent of instructor. May be repeated to a maximum of two (2) semester hours.

MVK 5936. Service Playing (2). Prerequisite: Consent of instructor. 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: Consent of instructor.

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 (8) 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 (4) 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 (4) semester hours.

MVK 5975. Master's Recital: Piano Pedagogy (0). (S/U grade only.) Required of piano pedagogy majors in lieu of thesis.

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 (4) semester hours. Credit may be modified by electing MVO 6260r (1), all Instruments.

MV—(B, J, K, O, P, 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 (12) semester hours. Credit may be modified by electing MVO 6360r (1), all Instruments.

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) 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 (24) 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

MVJ 6460r. App Mus Maj, Piano, Jazz

MVJ 6461r. App Mus Maj, Voice, Jazz

MVJ 6462r. App Mus Maj, Violin, Jazz

MVJ 6463r. App Mus Maj, Guitar, Jazz

MVJ 6464r. App Mus Maj, Bass, Jazz

MVJ 6465r. App Mus Maj, Flute, Jazz

MVJ 6466r. App Mus Maj, Saxophone, Jazz

MVJ 6467r. App Mus Maj, Trumpet, Jazz

MVJ 6468r. App Mus Maj, Trombone, Jazz

MVJ 6469r. App Mus Maj, Percussion, Jazz

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 (4) semester hours.

MVS 6566r. Guitar Repertory (1). Prerequisite: Consent of instructor. Required of guitar performance majors. May be repeated to a maximum of four (4) 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 a maximum of twelve (12) 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, P, S, V, W) 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, W) 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

Director: Robert J. Contreras

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 are based in three departments: biological science, psychology and nutrition, food and exercise sciences. There is no master's degree in neuroscience, but MS degrees with a concentration in neuroscience are available through the participating departments, for work completed with neuroscience program faculty. The program was established to promote basic research and to provide graduate education in neuroscience, via a close mentoring relationship between students and faculty. Students entering the program choose a faculty advisor and enroll in that advisor's department. Students are able to begin hands-on research immediately while discovering modern neuroscience through courses covering a broad range of approaches, from molecular to behavioral. The requirements for the neuroscience degree are uniform across departments so changing advisor and department later is possible, for example to begin specialized PhD dissertation research. Interdisciplinary research training is available involving molecular, cellular, physiological and behavioral mechanisms in sensory biology (with special emphasis on chemical, auditory, visual and pain senses), 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. Two NIH-funded training grants are available on a competitive basis to students in the program, each 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 The 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 website at *http://www.neuro.fsu.edu.*

Admission Requirements

The admission process begins at the neuroscience program website: *www.neuro.fsu.edu* where there are links to the on-line admissions system of the Florida State University Office of Admissions. A letter or email containing contact information sent to the neuroscience program office at *018 LON, Florida State University, Tallahassee FL 32306 (neuro@neuro.fsu.edu)* will ensure that potential faculty advisors can contact applicants even while the admissions mechanism is in process. This letter also triggers automatic consideration of all possible sources of financial aid. Applications must be complete with all supporting documents by January 15th, for Fall admission. Applicants must meet minimum criteria including a 3.0 undergraduate grade-point average (GPA) for the last two years, a 500 score on each of the verbal and quantitative sections of the Graduate Record Exam (GRE) and a combined verbal and quantitative score of 1100; three recent letters of recommendation from individuals who are able to assess the applicant's academic and research potential; and official transcripts. In addition to the above, international students also must score a minimum of 600 on the Test of English as a Foreign language (TOEFL). The GRE subject test is not required but good scores in the biology, psychology or biochemistry subject tests would be helpful. Applicants select three neuroscience faculty members as possible initial advisor, and ideally should contact these faculty members by phone or e-mail before applying. To ensure consideration by all potential faculty advisors, 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 the neuroscience faculty accept students interested only in MS-level training. Additional information is available on the program website or by request to the program office.

Degree Requirements

The direction and supervision of doctoral work resides primarily with the major professor and supervisory committee. Introductory courses required for all students are PSB 5057, Neuroscience Methods: Molecules to Behavior, and PSB 5077, Responsible Conduct of Research. Program curriculum is being revised. Please refer to *http://www.neuro.fsu.edu* for the most current requirements. Additional courses selected from the neuroscience core will be required. The 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 (24) 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; and

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 nutrition, food and exercise departments in this *Graduate Bulletin.*

NURSING

School of Nursing

Professors: Flannery, Frank, Speake; *Associate Professors:* Cottrell, Dean, Faria, Grubbs, Harris, Karioth, Kohler, Lauterbach; *Assistant Professors:* Aronovitch, Lesser, Tucker, Whiteside; *Associate in Nursing:* Epley; *Assistants in Nursing:* Elliott, King, Mersdorf, Schall, Strouts, Workman; *Visiting Assistant in Nursing:* Bulecza

The Florida State University master of science program in nursing offers a dual emphasis graduate curriculum with both clinical specialization and role development emphasis. The program may be completed in four to five semesters of full-time study or may be pursued on a part-time basis. The master's nursing program has received full accreditation by the National League for Nursing.

Clinical Specialty

Family Nursing focuses on the care of clients in families at different phases of development. The newly formed family, the childbearing family, or the aging family are clients. Infants, children, adolescents, adults, and aging family members are viewed in the context of the family system. The impact of a family member's acute and chronic illness on family functioning is considered. Course content includes family concepts, theories, assessment, and care of families at various developmental levels and in crisis situations. Content and clinical experiences in advanced practice are components of this specialty.

Community Health focuses on the care of the community as a client. Aggregates are examined for risk factors, illness prevention, and health promotion needs. Program planning, implementation, and evaluation are emphases in this clinical focus rather than individual client care.

Community Mental Health provides experiences with clients having emotional concerns. Opportunities are available for nursing practice with both individuals and groups of clients in community mental health settings. Community mental health nursing consultation and mental health promotion is also a focus.

These specialties and role development emphasis are offered only when there is sufficient demand.

Advanced Practice Roles

Nurse Practitioners provide primary care and/or case management 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 combines components of the nurse practitioner and clinical nurse specialist roles and 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), Adult Nurse Practitioners (ANP), and/or Clinical Nurse Specialists (CNS) in specialty areas. In addition, the curriculum provides a foundation for specialities that require specific amounts of time in practice before application for certification and/or licensure.

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 a practicum experience in a setting of the student's interest. Electives may be taken within the School of Nursing or related disciplines such as the College of Education.

Clinical nurse specialist case/care managers use a dynamic and systematic collaborative approach to providing and coordinating health care services to a defined population. It is a participative process to identify and facilitate options and services for meeting individual's health needs, while decreasing fragmentation and duplication of care and enhancing quality, cost-effective clinical outcomes. The framework for nursing care management includes five components: assessment, planning, implementation, evaluation, and interaction (ANA, 1996).

The course content includes theories of nursing case management, development of case management methodologies, and a practicum experience in a setting of the student's interest. Additional courses in computer technology and nursing health systems provide further support for the knowledge base.

For complete details of programs offered and admission requirements, plus a description of the school, its facilities, opportunities, and available financial assistance, refer to the "School of Nursing" chapter of this *Graduate Bulletin*.

Definition of Prefix

NGR — Nursing: Graduate

Graduate Courses

NGR 5001C. Advanced Health Assessment (3). Prerequisites: NUR 3065, permission of instructor. This core course is designed to develop knowledge and skills for obtaining and recording a systematic health history and physical examination of the child and adult. This course synthesizes the biologic, psychologic, and sociocultural knowledge and theories of nursing as they relate to comprehensive health assessment and the application of the data to common health problems.

NGR 5002L. Advanced Health Assessment for Nurse Practitioners (1). Prerequisite: NGR 5001C. Required specialty course in advanced health assessment for the combined role of nurse practitioner/clinical nurse specialist providing supervised clinical experience in comprehensive health assessment.

NGR 5051C. Advanced Wound Management (2). Elective. This course examines concepts and laboratory experience in the wound management of individuals of various ages. It focuses on the principles and strategies required to ensure effective healing of wounds resulting from diverse causes. Particular attention will be on debridement and suturing and prevention of infection.

NGR 5095. Holistic Nursing (3). Prerequisite: Must be registered nurse. Elective. Course is designed for the registered nurse preparing for an advanced practice role who wishes to develop increased abilities to provide holistic care to clients. Self-care is emphasized as the basis of the ability to effectively care for others. Holistic approaches, such as imagery, relaxation, and various touch therapies, that are used in nursing practice are explored. The psycho-physiology of body-mind-spirit healing is examined in depth.

NGR 5121. Theories in Nursing (2). Corequisite: NGR 5122. This core course provides a theoretical foundation for advanced nursing practice. Nursing theory will be explored from historical, philosophical and practice perspectives. It includes a focus on nursing concepts, theory analysis and synthesis, and evaluation of theory used in the discipline. Particular attention will be paid to nursing conceptual models and nursing theory. The role of research in theory development and nursing practice is presented as key in the continued development of nursing knowledge.

NGR 5122. Role Development Theories (2). Corequisite: NGR 5121. An introduction to the role components (competencies and strategies) characteristic of advanced practice nursing is provided (care provider, consultant, administrator/leader, researcher and educator). Theories applicable to the enactment of these roles are emphasized, including role transition and resocialization, learning styles, decision-making/problem-solving, change, marketing and health care economics.

NGR 5130. Contemporary Clinical Ethics in Health Care (3). Elective. Provides health care students with the opportunity to explore the ethical dimensions of their practice and to develop skills in ethical decision making. Students will practice the clinical application of ethical theory in relation to current health care issues and concerns.

NGR 5140. Clinical Pathophysiology for Advanced Nursing Practice I (3). Prerequisite: Undergraduate-level human physiology and anatomy course. First required core course in sequence of pathophysiology approached from clinical focus with applications in advanced nursing practice roles such as nurse practitioner, clinical nurse specialist, or nurse case manager. NGR 5140 and 5141 are prerequisites to clinical courses.

NGR 5141. Clinical Pathophysiology for Advanced Nursing Practice II (3). Prerequisite: Advanced pathophysiology I or consent of instructor. Second required core course in sequence of pathophysiology approached from clinical focus with applications in advanced nursing practice roles. NGR 5140 and 5141 are prerequisites to clinical courses.

NGR 5152. Dynamics of Health (2). Corequisite: NGR 5610. Required core course focusing on holistic approach of adaptation to life processes, well-being, and optimum functioning.

NGR 5190. Nursing Diagnostics and Therapeutics I (2). Prerequisites: NGR 5121, 5122, 5140, 5141, 5152, 5610. Corequisites: NGR 5741, 5741L in NP role. This course is the first of a two semester series that focuses on the critical thinking skills associated with the analysis and treatment of primary care populations (beginning and young families) concerned with health issues. Expansion of diagnostics and pharmacological knowledge with integration in the management of selected clients by advanced practice nurses is emphasized.

NGR 5191. Nursing Diagnostics and Therapeutics II (2). Prerequisites: NGR 5121, 5122, 5140, 5141, 5152, 5610. Corequisites: NGR 5741, 5741L if in NP role. This course is the second of a two semester series that focuses on the critical thinking skills associated with the analysis and treatment of primary care populations (middle-aged and aging families) concerned with health issues. Expansion of diagnostics and pharmacological knowledge with integration in the management of selected clients by advanced practice nurses is emphasized.

NGR 5255. Dynamics of Aging (3). Prerequisites: NUR 3215/3215L, 3148, or permission of instructor. Provides a holistic approach to the study of the elderly. Implications for professional practice are based on changes and adjustments occurring as part of the normal aging process. Common health disruptions in older citizens are examined.

NGR 5570C. Community Mental Health Nursing I (3). Prerequisites: NGR 5620, 5610, or permission of instructor. Focus is on methods by which the nurse can assist clients to

maintain, enhance, or regain a satisfying level of emotional functioning. Theory, techniques of therapeutic modalities, and interventions are also emphasized.

NGR 5571L. Community Mental Health Nursing II (3). Prerequisite: NGR 5570 or permission of instructor. Nursing practice with groups of clients in selected community settings. Opportunities are provided for utilizing concepts of social organization, community, and change theory.

NGR 5610. Conceptual Basis of Family Nursing (2). Corequisite: NGR 5152. Required course in family nursing major. Theoretical foundations of family functioning and family nursing examined.

NGR 5615L. Family Nursing I: Nursing Care of Families Experiencing Crises Laboratory (1). Prerequisite: NGR 5610. This course examines clinical application of the nursing process with families who are experiencing a maturational or acute situational crisis of adaptation; health maintenance and illness prevention is stressed. Students work with families in their defined area of interest, e.g., the chilbearing family, the childrearing family, the family with an adolescent member, the middle years family, the retired family, or the family with an elderly member. Field experiences are in the home as well as in ambulatory and acute episocic care settings.

NGR 5616L. Family Nursing II Laboratory: Nursing Care of Families Experiencing Chronic and Long-Term Health Problems (1). Prerequisite: NGR 5610. This clinical lab allows application of the nursing process with families in diverse settings who are experiencing chronic and long-term health problems. Interventions focus on the family as the unit of adaptation, and on rehabilitation and attainment of optimal health. Students work with families in their defined area of interest, and field experiences also is in the home as well as in ambulatory, acute and long-term care settings. Students participate in leading a support group.

NGR 5620C. Conceptual Bases in Community Nursing (4). Prerequisites: NGR 5121, 5152. Theory bases in epidemiology, systems, change, and social processes are analyzed in terms of community nurse specialists role. Concepts of community health nursing and nursing are applied to analysis of community assessment data. A plan of nursing service for aggregate-based practice is developed.

NGR 5625C. Community Health Nursing: Advanced Practice (4). Prerequisite: NGR 5620. Seminar and clinical practicum applying principles of health planning, development, and management in community health nursing. Program evaluation will be surveyed and applied.

NGR 5710. Theories of Teaching of Nursing (3). Prerequisite: Permission of instructor. Theories and concepts of curriculum development for schools of nursing are explored. Factors influencing educational programs in nursing are considered.

NGR 5710L. Theories of Teaching of Nursing Laboratory (1). Prerequisite: NGR 5754C or permisisson of instructor. Corequisite: NGR 5710. This course provides the student opportunities to apply nursing and educational theories to the teaching-learning process. Students develop classroom teaching plans based on an assessment of learners' needs. Teaching plans are implemented and learning outcomes evaluated for nursing students and/or other health care providers under the supervision of course instructors and other advising faculty members.

NGR 5712. Teaching Methods in Nursing Education (2). Prerequisite: NGR 5710 or permission of instructor. Corequisite: NGR 5941Lr. Major emphasis is on development of teaching skills, strategies, and evaluation methods. Roles and responsibilities of the nurse educator in facilitating the learning process are also included.

NGR 5712L. Teaching Methods in Nursing Education Laboratory (3). Prerequisites: NGR 5710; NGR 5710L or permission of instructor. Corequisite: NGR 5712. This course provides opportunities for the student nurse educator to apply concepts and methods of teaching-learning covered in previous and current courses. Under faculty supervision and guidance, students utilize a variety of methods in teaching and evaluating student nurses and other healthcare personnel in simulated and actual settings in collaboration with other nursing educators.

NGR 5715. Capstone: Application of Technology for the Nurse Educator (3). This capstone course is designed to provide healthcare educators with the opportunity to utilize advanced computer skills and electronic resources needed for the enhancement of teaching. Designed for the healthcare educator, the course allows the student to synthesize the aspects of the educator role while utilizing online/multimedia computer resources, and it developes strategies using technology to improve and enhance teaching skills.

NGR 5720C. Administrative Methods in Nursing (3). Prerequisite: NGR 5721 or permission of instructor. Activities will foster skill development in methods of personnel management, quality assurance, budget control, financial management, patient classification, and staffing systems.

NGR 5721. Nursing Administration Theory (3). Prerequisite: NGR 5121 or permission of instructor. Theories of change, health care economics, and management as they apply to nursing and nursing services are presented.

NGR 5726. Fiscal Responsibility and Outcomes Management (3). Prerequisites: NGR 5753, 5753L. Corequisites: NGR 5880, 5945L. This capstone course for the CNS/CM allows the student to synthesize the aspects of the advanced practice role while utilizing quality, cost effectiveness, and patient satisfaction indicators to determine outcomes. The incorporation of information from all levels of the organization, outcome monitoring activity, and awareness of the healthcare marketplace allows the student to assume the advanced practice role in successful outcomes management.

NGR 5741. Nurse Practitioner I (3). Prerequisites: term I core courses. Corequisites: NGR 5615L, 5800. Course examines and refines methods of assessment and management of symptom complexes and health problems which commonly affect children, adolescents, young adults, and child-bearing couples. The focus will be on the prevention of illness, the promotion of wellness, and the management of acute health problems. The role of the nurse practitioner as a vital force in contemporary health care will be explored.

NGR 5741L. Nurse Practitioner/ Clinical Nurse Specialist Laboratory I: Clinical Management of Young Families (4). Prerequisites: NGR 5002L. Corequisites: NGR 5190, 5741 (if in NP or CNS role major). This course provides clinical experiences in the management of health issues affecting young families. Application of the advanced practice nurse role in the promotion of wellness and the prevention of illness is emphasized.

NGR 5742. Nurse Practitioner II (3). Prerequisites: NGR 5190, 5615L, 5741, 5741L. Corequisites: NGR 5191, 5742L. Methods of assessment and management of symptom complexes or health deviations which commonly affect members of mature and aging families will be emphasized. The focus will be on prevention of illness, promotion of wellness, and management of chronic health problems. The role of the advanced practice nurse as a vital force in contemporary health care is explored.

NGR 5742L. Nurse Practitioner/Clinical Nurse Specialist Management II Laboratory: Clinical Management of Mature Adults and Aging Families(4). Corequisites: NGR 5191, 5742 (if in NP or CNA role major). This course provides clinical experiences in the management of health issues affecting mature and aging families. Application of the advanced practice nurse role in the promotion of wellness and the prevention of illness is emphasized.

NGR 5743L. Clinical Elective for Advanced Practice Nurses (1–6). Prerequisites: NGR 5615L, 5741, 5741L. A clinical elective for advanced practice nurses to provide specialized nursing practice opportunity to support the Advanced Practice nurses' nursing major.

NGR 5747. Dynamics of Nursing Systems and Health Care (3). Core course focusing on managed care/legal/ethical reimbursement issues and systems governing health care. This course supports all clinical roles in this era of managed care.

NGR 5752. Clinical Nurse Specialist/Case Care Manager I (3). Prerequisites: NGR 5140 or 5141, and term I core courses. Corequisite: NGR 5752L. The first course in the CNS role emphasis of Case Care Management for Advanced Practice Nurses. Course focuses on the underlying theories and disabilities across settings, through various models of case management, depending on the chronic or disabling conditions presented. Health maintenance/illness prevention is emphasized.

NGR 5752L. Clinical Nurse Specialist/Case Care Manager I Lab (3). Prerequisites: NGR 5140, 5141, 5747. Corequisite: NGR 5752. Quality, cost effective and lifelong health care is the focus in participant observational experiences. Students will have opportunities to analyze the competencies and strategies utilized by practicing case managers for vulnerable patients/families/populations in the changing health care arena. Students will identify the advanced practice subroles demonstrated by case manager role models. Opportunities will be provided for students to participate in subroles of the clinical nursing specialist in a variety of settings.

NGR 5753. Clinical Nurse Specialist/Case Care Manager II (3). Prerequisites: NGR 5752, 5752L. Corequisites: NGR 5747, 5753L, 5870. The second theory course in the APN/CNS role emphasis of case care management. Course focuses on complex, prevalent, chronic, disabling diseases and the subroles for APN case management.

NGR 5753L. Clinical Nurse Specialist/Case Care Manager II Lab (4). Prerequisites: NGR 5747, 5752, 5752L. Corequisite: NGR 5753. This course provides the opportunity for the student to develop and implement case management plans for individuals/families at risk for chronic or disabling conditions. Under the guidance of preceptors, the student will manage selected clients as a case load, utilizing the competencies and strategies of case management. The student will continue to develop clinical skills in the role of the clinical nursing specialist in the student's preferred specialty.

NGR 5754C. Fundamentals of Teaching for Master's Students (1). Prerequisite: Admission to program.This course expands and enhances undergraduate teaching/learning content. It is designed to provide students with the fundamental skills to diagnose teaching/learning needs and assess, implement and evaluate appropriate instructional strategies to produce desired educational outcomes with peers and clients. It is required as part of the graduate core curriculum.

NGR 5755. Validation of Advanced Nursing Practice: Outcomes Validation (3). Prerequisites: NGR 5742, 5742L. Corequisite: NGR 5758L. This capstone course for the NP/CNS allows the student to synthesize the aspects of the advanced practice role while utilizing intervention effectiveness, patient satisfaction, cost effectiveness and quality of care to influence health policy and improve personal practice environment of the NP/CNS.

NGR 5758L. Nurse Practitioner Practicum (5). Prerequisites: NGR 5190, 5615, 5742. Practicum to implement nurse practitioner clinical nurse specialist role.

NGR 5800. Research in Nursing (3). Prerequisites: NGR 5743L; admission to the master's program; permission of instructor. Core nursing course. Critical analysis of research process and methodology are applied to nursing problems and practice. The formulation of a research proposal to investigate a theoretical or clinical question in nursing is required.

NGR 5843. Application of Descriptive and Inferential Statistics for the Health Professional (4). This introductory course focuses on the concepts of descriptive and inferential statistics common to quantitative research with particular emphasis on applications relevant to the health professions. Parametric, nonparametric and exact inference techniques are introduced, with importance placed on the defensible application of such tools. Computer exercises are used to enhance conceptual understanding and demonstrate application competency.

NGR 5870. Computers in Nursing Research and Practice (3). Core course focusing on the application of computer technology in advanced nursing practice within clinical, educational, and administrative settings and in the conduct of research.

NGR 5880. Ethical and Legal Perspectives of Advanced Practice Nursing (2). This core course offers an opportunity for students to review contemporary legal and ethical issues and apply appropriate decision-making techniques for problem solving.

NGR 5905r. Directed Independent Study (1–3). Prerequisite: Permission of instructor. Directed independent study relevant to an area of specialized nursing practice. May be repeated to a maximum of five (5) semester hours.

NGR 5910r. Supervised Research (1–3). Prerequisite: Permission of instructor. Allows for research experience supervised by faculty that is different from student's thesis project. May be repeated to a maximum of five (5) semester hours as agreed upon by faculty.

NGR 5911r. Research Project (3–6). (S/U grade only.) Prerequisite: NGR 5800. The research project**,** as a non-thesis option, assists the student in the synthesis of concepts developed in previous courses; it meets the criteria for research competency expected by American Association of Colleges of Nursing (AACN). May be repeated to a maximum of six (6) semester hours.

NGR 5930r. Special Topics in Nursing (1–3). Prerequisite: Permission of instructor. 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 (9) semester hours.

NGR 5932r. Tutorial for Advanced Practice Nursing (1–3). Prerequisite: Permission of instructor. The tutorial will examine, in depth, the clinical management problems and issues encountered in advanced practice nursing.

NGR 5933. Management/Care of Client with HIV (2). This elective course addresses current epidemiological, pathophysiological and psychosocial concerns associated with HIV infection. Diagnostic procedures and treatment modalities are discussed. Techniques for providing support and promoting adaptation are described.

NGR 5938. Research Seminar (2). Elective. Seminar focusing on refinement and implementation of student's thesis.

NGR 5941Lr. Supervised Teaching Laboratory(1–5). Prerequisite: Permission of instructor. 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 (5) semester hours will count toward degree.

NGR 5943C. Nursing Administration Practicum (3). Prerequisite: NGR 5720 or permission of instructor. A seminar and practicum course which allows the student to apply management theory and methods. Evaluation of nursing services is emphasized. Students are assigned selected management responsibilities in the clinical environment.

NGR 5945L. CNS/Case Care Manager Practicum (2–5). Prerequisites: NGR 5747, 5753, 5753L. Practicum for CNS/Case Care Management Advanced Practice Nursing role. All subroles are practiced in the selected areas for case management.

NGR 5971r. Thesis (1–4). (S/U grade only.) Prerequisites: NGR 5800 and permission of instructor. Thesis project allows students to demonstrate utilization of research process in relation to a nursing problem. A maximum of six (6) semester hours counts towards degree.

NGR 6947L. Teaching of Nursing Practicum (5). Prerequisites: NGR 5710, 5712, 5941L, and permission of instructor. Teaching/learning theory and methods are applied in educational and clinical settings. The student prepares, implements, and evaluates classroom and clinical instruction.

NGR 8976. Master's Thesis Defense (0). (S/U grade only.)

Department of NUTRITION, FOOD AND EXERCISE SCIENCES

College of Human Sciences

Chair: Bob Moffatt; *Professors:* Haymes, Moffatt, Overton, Sathe, Toole; *Associate Professors:* Abood, Anderson, Bertram, Cook, Dorsey, Levenson, Rankins; *Assistant Professors:* Mistry, Panton; *Visiting Professor:* Hsieh; *Assistant in Athletic Training/Sports Medicine:* Sehgal; *Adjunct Professors:* Dupont, Stowers; *Coordinator of Food Service Administration:* Truesdell; *Professors Emeriti:* Erdman, Harris, Kassouny, Watts; *Affiliate Faculty:* Gibson, Hilker, Kelly, Lunt, Nichter, Oravitz, Perez, Wall, Watson; *Courtesy Faculty*: Kehayias

The Department of Nutrition, Food and Exercise Sciences is in a unique position nationwide to provide graduate course work and research opportunities in human nutrition and food science, as well as in exercise physiology and motor learning. 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, one in nutrition and food science with an emphasis in food science, nutrition science, clinical nutrition, sports nutrition, or nutrition education and health promotion, and the other master's in movement science with concentrations in exercise physiology and motor behavior (with emphasis in motor learning/control.) Thesis and nonthesis options are available for the master's programs. The motor learning/control emphasis only offers the thesis option.

The department also has a dietetics internship program which, in conjunction with the master's degree in nutrition and food science, provides a postbaccalaureate route for students to become eligible to take the Registration Examination for dietitians. Students applying for the internship program must have completed ADA plan IV or V requirements.

At the doctoral level there are also two programs, one leading to a doctor of philosophy (PhD) in human sciences with a concentration in either human nutrition or food science, and the other leading to a PhD in movement science, with a concentration in either exercise physiology or motor behavior (emphasis in motor learning/control). These doctoral programs are designed to enable students to achieve mastery in a specialized area of nutrition, food science, exercise physiology, or motor behavior and to become independent researchers. Research studies include nutrition and performance, environmental effects on exercise, exercise and lipoprotein metabolism, neural control of cardiovascular responses to exercise, sensory integration and rehabilitation of posture control in Parkinson's disease, nutrition education in the community and internationally, health behavior and health communication, eating disorders, computerization in dietetics, obesity, trace mineral bioavailability and metabolism, protein biochemistry, nutrient regulation of gene expression, microbiological aspects of food, and food quality.

The department is developing a center for the study of chronic disease prevention with an opportunity for interdisciplinary emphasis on behavioral, physiological and metabolic approaches.

Research Facilities

Facilities include laboratories with state-of-the-art equipment for research in the above listed areas. Labs are equipped for work in vitamin and mineral analysis, food safety, protein analysis and molecular biology, including Western, Northern and Southern analysis, PCR, DNA cloning and sequencing, HPLC, and microbiology. Core facilities are available for peptide synthesis, protein sequencing, oligonucleotide synthesis, mammalian cell culture, and hybridoma technology. Research programs involving experimental animals are conducted in laboratories housed in the **Biomedical Research Facility.** Current efforts focus on the studies of trace metal metabolism, the molecular adaptations to exercise, and the actions of food restriction/exercise on the cardiovascular system in hypertensive animals. The exercise physiology laboratories are equipped to conduct measurements of cardiovascular, thermal, metabolic and biochemical responses to various forms of exercise. A large environmental chamber permits studies of the influence of both acute and chronic exposure to cold/hot conditions and exercise performance. Equipment for assessment of respiratory function and body composition are routinely used in both teaching and research. The **Aging, Functionality, and Motor Behavior Laboratory** is newly remodeled and contains state-of-the-art facilities for single or multiple subject testing and for large applied motor skill testing for gait and balance disturbances, chronic motor dysfunction, and kinematic analysis. The laboratory also is equipped with a Biodex Multi-Joint System 3 Pro orthopedic testing and rehabilitation system and an area that can assess functionality by measuring activities of daily living under standard conditions.

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 The Florida State University has been identified as a target discipline for the **Patricia Roberts Harris Fellowship.**

Master of Science in Food and Nutrition

Areas of specialization include:

1. Food science;
2. Nutrition science;
3. Clinical nutrition;
4. Sports nutrition; and
5. Nutrition education and health promotion.

Thesis (thirty [30] semester hours minimum) and nonthesis (thirty-six [36] 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 or a minimum score of 1000 on the Graduate Record Examination (GRE). Students are expected to have background supporting courses in food and

nutrition, general and organic chemistry, elementary biochemistry, microbiology, and physiology. Deficiencies in supportive courses may be met by completing courses at the undergraduate level while in residence for the graduate degree.

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 plan IV or plan V requirements for the American Dietetics Association (ADA) 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: FOS 5930, 5936, HUN 5242 or 5243, HUN 5802, HUN 5930 (three [3] semester hours minimum), 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 [6–9] semester hours) and are required to write a prospectus and a thesis. Nonthesis master's students must register for HUN 5906, Directed Individual Study (three to six [3–6] 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 [2] semester hours), is recommended but not required. Analytical chemistry is desirable for some specializations.

Master of Science in Movement Science

Two areas of concentration are offered at the master's level:

1. Exercise physiology; and

2. Motor behavior, with areas of emphasis in ergonomics and motor learning/control.

Both thesis (thirty-six [36] semester hours) and nonthesis (forty-five [45] semester hours) programs are offered. Admission to the exercise physiology and motor behavior programs requires a GPA of 3.0 or a minimum score of 1000 on the GRE.

Core courses required for a concentration in exercise physiology are: PET 5235C, PET 5355C, PET 5930, HUN 5802, HUN 5930 (three [3] semester hours), EDF 5400 or STA 5156, PET 5367, HUN 6940r; and two courses from the following: PET 5389, 6365, 6368, and 6386. For the thesis option, the student must also take HUN 5906 (three [3] semester hours), HUN 5971 (six to nine [6–9] semester hours)], and an additional elective (three [3] semester hours). For the nonthesis option, the remaining requirements include HUN 5906 (three [3] semester hours), PET 8945r (nine [9] semester hours), and additional electives (nine [9] semester hours).

Core courses required for a concentration in motor behavior with an emphasis in motor learning/control are: PET 5235C, PET 5355C, PET 5216, PET 6931r Advanced Topics: Programming in Motor Skill Research, PET 5227 or 5228, PET 5930 and HUN 5930 (three [3] semester hours) and HUN 5802L, EDF 5400, HUN 5971 (six to nine [6–9] semester hours), and additional electives (six [6] semester hours).

Doctoral Programs

The doctor of philosophy in human sciences includes food science and human nutrition as areas of concentration.

In addition to meeting the Universitys requirements for graduate admission, admission to all doctoral programs requires a GPA of 3.0 and a minimum score of 1000 on the GRE, three letters of recommendation, and a letter of intent describing research interests. A master's bypass option is available.

The PhD program is competency-based and as such has no total hours requirement; however, the student must advance to mastery of the field of specialization. A diagnostic examination may be required during the first semester of residence to assist in planning the program of studies. An area of emphasis (nine to twelve [9–12] 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, HUN 6930r (must enroll each semester for one [1] semester hour), HUN 6248 (six [6] semester hours minimum), HUN 6940r (three [3] 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 (6) semester hours of course work in a foreign language, statistics, or specialized methods.

Admission to candidacy is dependent upon passage of the preliminary examination. Questions of an analytical and problem-solving nature are submitted by the student's committee members. Prior to the oral segment of the examination, students must submit a rationale and outline of their dissertation research. The oral portion of the examination covers questions arising from both the written exam and the proposed research design. After all segments of the preliminary examination have been passed, the student may then enroll in HUN 6980r, Dissertation (twenty-four [24] semester hours).

At the dissertation defense, students must submit a draft of a manuscript for publication pertaining to their dissertation.

The doctor of philosophy in movement science includes exercise physiology and motor behavior, with areas of emphasis in motor learning/control.

Specific course requirements for the concentration in exercise physiology are PET 6365, PET 6368, PET 6386, PET 5367, PET 6930r (one [1] semester hour per semester enrolled), HUN 6906 (three [3] semester hours), HOE 6938, EDF 5401, EDF 5402, BMS 5500, 5510, HUN 6940r (three [3] semester hours), and selected electives (nine [9] semester hours minimum).

Specific course requirements for the concentration in motor behavior, with areas of emphasis in motor learning/control are: PET 6339, PET 5235C, PET 5227, PET 5228, PET 6930r (one [1] semester hour per semester enrolled), PET 6931r, HOE 6938, HUN 6906 (two [2] semester hours minimum), HUN 6911r (three [3] semester hours), EDF 5402, EDF 5401, HUN 6940r (three [3] semester hours), EDF 5406, COP 5116, SOW 5455, EXP 5408, PSB 5056, EXP 5508, and EXP 6609, HUN 5802, and PSY 5705.

The research tool requirement, dissertation diagnostic examination, preliminary examination, and manuscript expectation are the same as previously discussed for the PhD in human sciences with a concentration in human nutrition or food sciences.

Interdisciplinary Program in Neuroscience

The program in neuroscience provides interdisciplinary training leading to the degree of doctor of philosophy in neuroscience. Participating faculty hold appointments in the Departments of Nutrition, Food and Exercise Sciences, Biological Science and Psychology. Students enroll in the department of their initial faculty advisor/major professor but may take neuroscience courses offered by two or more of the participating departments. Some Department of Nutrition, Food and Exercise Sciences faculty are members of the neuroscience program, with doctoral directive status for the neuroscience PhD (in addition to DDS for the departmental PhD). For Neuroscience faculty contact the departments of Biological Science or Psychology. Interdisciplinary research training is available involving molecular, cellular, physiological and behavioral mechanisms in sensory biology (with special emphasis on chemical, auditory, visual and pain senses), synaptic physiology, learning and memory, neuroendocrinology/hormone-regulation, neural development and plasticity, neural control of food intake, neural control of reproductive behavior, circadian rhythms, cardiovascular regulation and the genetics of behavior. The Program has two NIH funded training grants 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 nutrition, food and exercise sciences are available on the same basis as for the rest of the department. For more information, see the "Program in Neuroscience" chapter in this *Graduate Bulletin* and the program in neuroscience website at *http://www.neuro.fsu.edu.*

Definition of Prefixes

DIE — Dietetics
FOS — Food Science
FSS — Food Service Systems
HSC — Health Education and Safety
HUN — Human Nutrition
PET — Physical Education Theory

Advanced Undergraduate Courses

DIE 4244. Nutrition in Disease (3). Prerequisites: HUN 3224; BSC 3086 or PET 3301C; 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). Corequisite: DIE 4244. 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; HUN 1201. The planning, implementation, and evaluation of nutrition programs in the community and public nutrition policy formulation.

FOS 4114C. Food Science (3). Prerequisites: CHM 2200C; FOS 3022, 3022L. Chemistry of basic raw foods and their behavior during processing. Assessment of food quality. Lecture and laboratory.

FSS 4139. Institutional Food Economics (3). Prerequisites: DIE 3003; ECO 2000 or 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 permission of instructor. 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 nonmajors.

PET 4244C. Motor Control and Learning (4). Link Course: PET 3301C. Examines theories, principles, and practical applications in motor control and learning. Attention is given to the physiological and psychological foundations of motor control and learning. The motor control and learning laboratory portion of this course constitutes one (1) semester hour of the four (4) semester hours course. Required for nutrition and fitness majors.

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. Clinical Nutrition in the Treatment and Prevention of Disease (4). Prerequisites: BCH 3023C or equivalent; DIE 4244 or equivalent; PET 3301C or equivalent. The application of nutritional principles to the treatment and prevention of diseases.

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 (4) 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 (4) 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 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 (3). 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 (6) semester hours.

HUN 5910r. Supervised Research (1–3). (S/U grade only.) A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) 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 (4) 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 (6) semester hours.

HUN 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

HUN 6248r. Advances in Nutrition and Food Science (3–12). Prerequisites: HUN 5242, 5243; FOS 5936. Current topics in proteins, carbohydrates, lipids, minerals, or vitamins. May be repeated to a maximum of twelve (12) semester hours.

HUN 6906r. Directed Individual Study (1–6). (S/U grade only.) May be repeated to a maximum of six (6) semester hours.

HUN 6911r. Supervised Research (3–5). (S/U grade only.) May be repeated to a maximum of five (5) 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 (3) semester hours.

HUN 6980r. Dissertation (1–12). (S/U grade only.)

HUN 8945r. Supervised Field Experience (1–9). (S/U grade only.) Prerequisite: Permission of instructor. Supervised experience in applied dietetics. May be repeated to a maximum of eighteen (18) semester hours in a two-year period to meet ADA experience requirements.

HUN 8964r. Preliminary Doctoral Examination (0).

HUN 8966r. Master's Comprehensive Examination (0).

HUN 8976r. Master's Thesis Defense (0).

HUN 8985r. Dissertation Defense Examination (0).

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 5053. Motor Control (3). Deals with information processing and biomechanical demands placed on humans in situations of motor control. Analyses made of research evidence related to attention demands, motor program structure, biokinematics, and task complexity. Offered alternate years.

PET 5054C. Motor Skill Learning (3). Research and theory of learning, performance, and related factors as applied to motor skills.

PET 5077. Physical Dimentsions 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 5553. Cardiorespiratory 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 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 (4) semester hours.

PET 6339. Neuromuscular Integration in Motor Skills (3). Focus upon the relationship between biological and mechanical aspects of voluntary and reflexive movement. Functional anatomy of the human central nervous system will be studied with an emphasis upon motor components. Offered alternate years.

PET 6365. Exercise and the Cardiorespiratory System (4). Prerequisite: Advanced exercise physiology. A study of the cardiorespiratory 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 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 (12) semester hours.

PET 8945r. Exercise Physiology Internship (1–9). (S/U grade only.) Prerequisites: PET 5355C, 5389C; permission of instructor. 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 (9) semester hours.

OCEANOGRAPHY
see also Meteorology

Department of OCEANOGRAPHY

College of Arts and Sciences

Chair: David Thistle; *Professors*: Burnett, Chanton, Clarke, Dewar, Hsueh, Iverson, Krishnamurti, Landing, Marcus, Nof, O'Brien, Stern, Thistle, Weatherly, Winchester; *Associate Professor:* Speer; *Assistant Professors*: Kostka, St. Laurent; *Director, Edward Ball Marine Laboratory*: Iverson; *Director, Women in Math, Science, and Engineering Program:* Marcus; *Professor Emeritus:* Sturges

A graduate program in oceanography has existed at The 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 department 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. 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. A faculty member has also been a recipient of the John Simon Guggenheim Award and has been elected to the National Academy of Sciences.

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 School of Computational Science and Information Technology; 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.

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 specialities in biological, chemical, geochemical, and physical oceanography. Interdepartmental studies, for example, atmospheric chemistry, air-sea interaction, and geophysical fluid dynamics, are arranged in cooperation with the Departments of Biological Sciences, Chemistry and Biochemistry, Geological Sciences, Mathematics, Meteorology, Physics, Statistics, and the Geophysical Fluid Dynamics Institute.

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.

The paragraphs below suggest the proper preparation for each of the four areas of specialization in oceanography.

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 course work in organic chemistry and introductory statistics; *Chemical:* BS or BA in chemistry, with course work 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; course work in advanced mechanics, differential equations, advanced calculus (including vector calculus), partial differential equations, asymplistic methods, and fluid mechanics.

The MS degree requires that the student complete thirty-three (33) semester hours of course work and submit a thesis covering an original research on a topic. Reading knowledge of a foreign language is not required. A minimum of eighteen (18) of the required thirty-three (33) semester hours must be taken in the Department of Oceanography 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 (18) semester hours of formal course work 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.

Definition of Prefixes

MAP — Mathematics: Applied
OCB — Oceanography: Biological
OCC — Oceanography: Chemical
OCE — Oceanography
OCG — Oceanography: Geological
OCP — Oceanography: Physical

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 5515. Marine Microbiology (3). The role of microorganisms in the economy and productivity of the sea. The role of microbes in geological and geochemical processes.

OCB 5566. Zooplankton Ecology (3). Ecology of marine micro and macro zooplankton; major topics include biogeography, life histories, effects of physical, chemical, and biological factors on population dynamics. Open to advanced undergraduates with consent of instructor.

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 consent of instructor. 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 5065. Environmental Chemistry (3). Prerequisite: Consent of instructor. Principles of water chemistry, hydrology, and systems analysis applied to solving problems in water quality.

OCC 5415. Marine Geochemistry (3). Prerequisite: OCC 5050. Introduction to geochemistry of earth with emphasis on processes controlling elemental cycling between the earths crust, oceans, and atmosphere. Controls on the chemical composition of seawater and its geological history.

OCC 5416. Organic Geochemistry (3). Prerequisite: OCC 5050. Occurrence and transformations of organic substances in the marine environment.

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 course in chemistry and a course in mathematics, 1000 level or higher. 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.

Physical Oceanography

MAP 5431. Introduction to Fluid Dynamics (3). Prerequisites: PHY 3048C, MAP 4153; Corequisite: MAP 4341, 5345, or consent of instructor. 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 (18) semester hours.

OCP 5056. Introduction to Physical Oceanography (3). Prerequisite: PHY 2049C, MAP 2302, or consent of the instructor. 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 consent of instructor. 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 5253. Fluid Dynamics: Geophysical Applications (3). Prerequisites: MAP 5431 and partial differential equations, or consent of instructor. 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 5255. Stability of Geophysical Fluid Flows (3). Classical linear stability theory of fluid flows with examples and applications in geophysical fluid dynamics. Specific topics include inviscid, viscous, and stratified parallel shear flow, thermal convection, double-diffusive systems, and rotating systems.

OCP 5259. Eddies and Rings as Heat Exchange Mechanism (3). Prerequisites: MAP 5431; OCP 5056, 5253, 5285. Migratory behavior of eddies, rings, and gyres. Evolution and decay of eddies in the upper deep and intermediate ocean.

OCP 5262. Coastal Ocean Dynamics (3). Prerequisites: MAP 5431, OCP 5253; or consent of instructor. Dynamics of wind-driven coastal flow. Effects on coastal flows of coastline geometry, bottom topography, friction, and density stratification. An overview of the physical processes for advanced graduate students.

OCP 5263. Equatorial Dynamics (3). Prerequisite: Consent of instructor. 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 consent of instructor. 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 consent of instructor. 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 (30) 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 (10) 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 (30) 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 (10) 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 (3) hours may apply to the master's degree, five (5) to the PhD.

OCE 5940r. Supervised Teaching (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree, five (5) to the PhD.

OCP 5930r. Special Topics in Physical Oceanography (1–3). May be repeated to a maximum of thirty (30) 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 (10) 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 subdisciplines will be used to show the interdisciplinary nature of modern oceanography.

OCE 5018r. 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. May be repreated to a maximum of six (6) semester hours.

OCE 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

OCE 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours is required.

OCE 8964r. Preliminary Doctoral Examination (0). (S/U grade only.)

OCE 8976r. Master's Thesis Defense (0). (S/U grade only.)

OCE 8985r. Dissertation Defense (0). (S/U grade only.)

OPERA/MUSICAL THEATRE
see Music

ORAL INTERPRETATION
see Communication

ORGANISMAL BIOLOGY
see Biological Science

Department of PHILOSOPHY

College of Arts and Sciences

Chair: Russell M. Dancy; *Professors*: Dancy, Hodges, Mele; *Associate Professors*: Dalton, Matthews, Morales, Rawling; *Assistant Professors*: Crisp, Nahmias; *Visiting Professor*: Ruse; *Visiting Assistant Professors:* Gert, Maslen; *Courtesy Professor*: Levitz

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 25–30 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); and

3. Minimum grade point average (GPA) of 3.0 in the last two years of undergraduate study.

One or another of these requirements may be waived for applicants with exceptional qualifications.

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 thesis 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)
PHI	5956	Introduction to Philosophical Methods (3)

Students must also pass PHI 5135, Modern Logic I, with a grade of "B–" or better, or take an exam in logic.

Doctoral students will take preliminary examinations in the history of philosophy and a special area related to the student's dissertation topic.

Doctoral students must complete at least ninety (90) semester hours, including a minimum of twenty-four (24) 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 both PHI 5135 and 5956, and take a single comprehensive examination.

They must complete at least thirty (30) semester hours, including six (6) thesis hours. The MA degree is awarded upon the successful oral defense of an original thesis.

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
PHI — Philosophy
PHM — Social and Political Philosophy

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 (12) 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 (12) 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 amaximum of twelve (12) 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 (12) 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 (12) semester hours.

PHI 5135. Modern Logic I (3). Prerequisite: PHI 3130, equivalent, or permission of instructor. 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 permission of instructor. 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 (12) 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 metaethics, including such topics as consequentialism, contractualism, deontology, divine command theory, expressivism, intuitionism, and realism. The survey also includes reference to historical figures such as Socrates, Plato, Aristotle, Hobbes, Hume, Kant, Bentham, and Mill.

PHI 5934r. Topics in Philosophy (3). A variable content research seminar on selected philosophical problems. May be repeated to a maximum of twelve (12) semester hours.

PHI 5956. Introduction to Philosophical Methods (3). Prerequisite: Instructor's 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 (1–2) semester hours for a reading course; three (3) semester hours for a reading course with substantial writing. Repeatable with the permission of instructor to a maximum of twelve (12) semester hours.

PHI 6205r Philosophical Logic (3). Prerequisite: PHI 3130, equivalent; or permission of instructor. 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 (12) 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 (12) 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 (12) 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 (12) 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 (12) 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 (12) 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 (12) 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 (12) semester hours.

PHI 6808r. Aesthetics (3). A seminar exploring major problems in aesthetics, such as the nature of art, artistic creativity, aesthetic appreciation, and representation. Readings may be historical or contemporary. May be repeated to a maximum of twelve (12) 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 (12) 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 (12) semester hours.

PHI 5908r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours. For degree restriction see graduate handbook.

PHI 5913r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

PHI 5945r. Supervised Teaching (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

PHI 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

PHI 6980r. Dissertation (1–12). (S/U grade only.)

Examinations

PHI 8964r. Preliminary Doctoral Examination (0).

PHI 8966r. Master's Comprehensive Examination (0).

PHI 8976r. Master's Thesis Defense (0).

PHI 8985r. Dissertation Defense (0).

PHOTOGRAPHY
see Art

PHYSICAL SCIENCE
see Physics

Department of PHYSICS

College of Arts and Sciences

Chair: Kirby Kemper; *Associate Chair:* Van Winkle; *Professors:* Baer, Berg, Brooks, Cottle, Crow, Dagotto, Dennis, Duke, Edwards, Fisk, Hagopian, Kemper, Kimel, Manousakis, Moreo, W. Moulton, Owens, Petrovich, Prosper, Rikvold, Riley, Robson, Schlottman, Schrieffer, Skofronick, Tabor, Van Winkle, von Molnar, Wahl; *Associate Professors:* Blessing, Bonesteel, Capstick, Dobrosavljevic, Lind, Ng, Piekarewicz, Shaheen; *Assistant Professors:* Adams, Cao, Eugenio, Reina, Xiong, Yang; *Visiting Assistant Professors*: Hong, Wiedenhofer; *Professors Emeriti:* Albright, Desloge, Fletcher, Fox, Hunt, Kromhout, G. Moulton, Philpott, Plendl, Sheline, 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 internationally recognized faculty includes many who have earned prestigious awards for their research and teaching, including the Nobel prize. Undergraduates, graduate students and postdoctoral fellows participate in all aspects of research in physics at The Florida State University. This research includes strong programs in the areas of computational, experimental and theoretical physics in high energy, nuclear, condensed matter, and atomic and molecular physics. Many opportunities exist for interdisciplinary research, particularly in the Center for Materials Research and Technology (MARTECH), the National High Magnetic Field Laboratory (NHMFL), the School of Computational Science and Information Technology (CSIT), the Institute of Molecular Biophysics (IMB), and, as a separate degree program, in chemical physics. Students are expected both to begin their research early and to make significant progress in that research by the end of their second year in residence.

Research at The Florida State University involves a close collaboration between experimentalists and theorists (both analytical and computational) and between students and faculty. The department has an extensive technical support staff, populating two machine shops, an electronics shop, a technical graphics shop, as well as additional technical staff dedicated to research projects. Departmental facilities are fully networked and computational facilities abound.

Available experimental facilities include: a 9.5 MV Super FN Tandem Van de Graff accelerator with superconducting post accelerator, 3 and 4-MV Van de Graffs, electron spin resonance and electron double nuclear resonance spectrometers, a detector development laboratory for high-energy particle detectors, high resolution Fourier transform IR spectrometers, liquid helium and dilution refrigerators, thin film preparation facilities including sputtering and laser ablation, ultra-high vacuum instrumentation including surface analysis (LEED, Auger, optical) and molecular beam epitaxy, synthesis and characterization facilities for novel materials including high temperature superconductors, 3 X-ray diffractometers with various sample stages for high and low temperature studies, multi-sample analysis and small angle studies, clean room and nanofabrication facilities, scanning electron, tunneling and optical microscopies with image analysis, quasi-elastic light scattering, polarized electron energy loss spectroscopy, and a helium atom surface scattering facitity. Additionally, the NHMFL boasts a modern infrastructure enabling research in magnetic fields including the highest powered DC fields in the world used mainly for materials science research, facilities providing the highest fields in the world for nuclear, ion cyclotron and electron magnetic resonance spectrometers as well as magnetic resonance imaging. All facilities mentioned are integral parts of the research programs of graduate students. More information on faculty research can be obtained by visiting the department's website: *http://www.physics.fsu.edu.*

Computers are an essential part of almost all teaching and research programs in the department. The computational infrastructure is upgraded continuously to keep pace with advances in technology. The department is fully connected to the Internet and virtually all graduate students are active users of the computational facilities. In addition to their use in research, students are expected to utilize numerical methods for problem solving in their course work.

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 (6) core graduate courses that every research physicist should master. 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 three (3) of the above core courses, including at least one (1) course in Quantum Mechanics.

For the **PhD** degree, the student is required to take either PHY5667 or PHY 5670. Even though the other six graduate core courses are not specifically required, these courses should be part of the graduate program. Whether these courses are taken or not, students will be tested on their content in the written portion of the Preliminary Examination. After attaining mastery of the content of the core graduate courses, a PhD student is required to take two (2) of the following three (3) courses: PHZ 5305, PHZ 5354, and PHZ 5491. In addition the student is required to complete one (1) more course from the following set: PHZ 5307, PHZ 5355, and PHZ 5492. Though there are no other specific course requirements, the student is encouraged to take other specialized courses that are offered by the physics department.

Examinations

Diagnostic Examination. All incoming students are required to take the diagnostic exam, given ten days before the start of the Fall semester. The purpose of this examination is to aid the Graduate Studies Committee in advising students in the selection of their courses. Other examinations are listed below.

Proficiency Examination. Each student is required to take this examination during the first year and pass at the master level or higher. The written and oral portions of the examination cover undergraduate material in general physics, electricity and magnetism, mechanics, modern physics, optics, thermodynamics and quantum mechanics. This examination is offered twice a year in October and March.

Master's Comprehensive Examination. 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 (4) of the graduate core courses with a grade of "B" or better.

Preliminary Examination. The PhD preliminary examination consists of: 1) a written portion on the material in the first six graduate core courses listed above; 2) a written tentative prospectus of a research topic suitable for PhD dissertation; and 3) an oral examination by the student's supervisory committee on the tentative prospectus administered.

PhD Dissertation Defense. 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 two elementary laboratories for one semester.

To qualify for a non-thesis degree, a student must complete thirty (33) semester hours in courses numbered 4000 and above. At least twenty-one (21) semester hours must be taken on a letter grade basis.

Thesis students must complete thirty (30) semester hours in courses numbered 4000 and above. At least eighteen (18) semester hours must be taken on a letter grade basis. A minimum of six (6) semester hours must be earned in PHY 5971 (Thesis).

For both thesis and non-thesis degrees, at least nine (9) semester hours must be earned in courses PHY 5246, 5346, 5347, 5524, and 5645. In addition, no more than three (3) semester hours each of PHY 5918 and 5940 may be counted toward the required semester hours.

In addition the student must pass the proficiency examinations at the MS level and the Master's Comprehensive Examination.

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 the proficiency examination described above at the PhD level; and 2) pass the preliminary examination. In addition each doctoral candidate is required to teach two elementary laboratory sections for two semesters. 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.*

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 the supervisory committee no later than one month before the student is ready to take the oral portion of the preliminary examination. 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 accomplishment. The various options to satisfy this requirement are specified in the *Physics Graduate Studies Guide.*

Doctor of Philosophy in Chemical Physics

The departments of Physics and Chemistry and Biochemistry offer an interdepartmental program leading to a PhD degree in chemical physics. Further information can be obtained from the "Chemical Physics" chapter of this *Graduate Bulletin* or by writing to: *Chemical Physics Representative, Department of Physics, The Florida State University, Tallahassee, FL 32306.*

Definition of Prefix

PHY — Physics
PHZ — Physics: Specialized

Graduate Courses

Note: the prerequisites are to be interpreted rather liberally; in general, consent of instructor can replace any prerequisite.

PHY 5083C, 5084C. Physics in the Secondary Science Classroom A, B (3, 3).

PHY 5142. Current Topics in Physics: Part II (3). Prerequisite: Consent of instructor. Corequisite: PHY 5645. Properties of nuclei and particles, relativistic kinematics, energy loss phenomena, nuclear structure, gauge theories, unification, parton model, superconducting accelerators, experiment design, quark model of particles and nuclei.

PHY 5154C. Visualization and Symbolic Application Methods in Physics (3). Prerequisites: PHY 4222; PHZ 4151C. Instruction and practice in the use of computer graphics and symbolic mathematics to solve physics problems, symbolic algebra, differentiation, integration, linear algebra, differentiation equations and the generation of computer code from symbolic mathematics programs, basic techniques in visualization for scientific programs, interactive graphics.

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 5158C. Management of Scientific Computations (3). Prerequisite: COP 4710. Instruction and practice in the use of distributed computing, relational and object-oriented databases, automated processing and publishing techniques for conducting computationally and numerically intensive computations.

PHY 5226. Intermediate Mechanics (3). The principles and applications of the Newtonian mechanics of particles and systems of particles. Noninertial 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 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. Intermediate Electricity and Magnetism (3). Electrostatics, magnetostatics, time-varying electric and magnetic fields, and Maxwells equations.

PHY 5327. Advanced Electricity and Magnetism (3). Prerequisite: PHY 4323 or 5326 or its equivalent. The applications of Maxwells equations, electromagnetic waves, and radiation.

PHY 5346, 5347. Electrodynamics A, B (3, 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, 5608r. Quantum Theory of Matter A, B (3, 3). Quantum mechanics and its applications to particles, nuclei, atoms, molecules, and condensed matter.

PHY 5645, 5646. Quantum Mechanics A, B (3, 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; continous 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 consent of instructor. 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 guage 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 5846C. Techniques in Experimental Physics (3). Applications of modern research techniques in experimental physics including electronics, radiation detectors, data collection and analysis, accelerators and beams, and experimental system design and construction techniques.

PHY 5904r. Directed Individual Study (3). May be repeated to a maximum of thirty-six (36) semester hours.

PHY 5909r. Directed Individual Study (1–12). (S/U grade only.) May be repeated to a maximum of forty-eight (48) semester hours.

PHY 5918r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) 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 (10) 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 (1–5). (S/U grade only.) Laboratory teaching under the direction of a senior faculty member. A maximum of three (3) semester hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

PHY 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

PHY 6165. Issues in Advanced Physics (3). Prerequisites: PHY 5246, 5346, 5524, 5645. Course supplements physics students' preparation for the comprehensive examination.

PHY 6935r. Advanced Seminar (1). (S/U grade only.) May be repeated to a maximum of ten (10) semester hours.

PHY 6937r. Selected Topics in Physics (1–3). Prerequisite: Graduate standing. May be repeated to a maximum of fifteen (15) semester hours.

PHY 6938r. Special Topics in Physics (3). (S/U grade only.) Each semester a number of courses labelled 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 (18) 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 (8) students in each tutorial. May be repeated to a maximum of fifteen (15) semester hours.

PHY 6980r. Dissertation (1–12). (S/U grade only.)

PHY 8964r. Preliminary Doctoral Examination (0).

PHY 8966r. Master's Comprehensive Examination (0).

PHY 8976r. Master's Thesis Defense (0).

PHY 8985r. Dissertation Defense (0).

PHZ 5156C. Computational Physics Laboratory (3). Prerequisites: COP 2000; MAP 3305; PHY 4222 or consent of instructor. 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 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). Prequisites: 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.

PHYSIOLOGY
see Biological Science; Medicine

Department of POLITICAL SCIENCE

College of Social Sciences

Chair: Dale L. Smith; *Professors*: Atkins, Barrilleaux, Berry, Crew, Flanagan, G. Parker, Scholz; *Associate Professors*: Carsey, Claggett, Hensel, Jackson, Kemp, Kim, Mitchell, Mondak, Moore, S. Parker, Smith; *Assistant Professors*: Canache, Martin, Souva; *Professors Emeriti:* Bone, Dye, Flory, Glick, Gray, Palmer, Roady, St. Angelo, Vanderoef; *Affiliated Faculty:* Feiock

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.

Admissions

Students pursuing a PhD or master's with a major 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 applicants' own statement of interests and goals. The minimum GRE for consideration is a combined score of 1100 on the verbal and quantitative portions, with no less than 500 in either section. 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 course work and a 3.5 on master's level work already completed. Three (3) 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 February 1st 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 either a 3.0 GPA on the second half of undergraduate work, or a combined score of 1000 on the verbal and quantitative portions of the GRE. In any event, the GRE must be taken. The applicant's statement of goals and interests (approximately 500 words) also is required.

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 20 states and several foreign countries, the department is well represented in the discipline.

Departmental Assistantships

Departmental funding is awarded competitively, not only to provide financial assistance but also to afford outstanding students a structured experience in teaching and research. Such awards are generally granted only to those students who plan to complete their PhD in the department. The strongest applicants may be nominated for college or University funding, and will be considered for the department's Collins Fellowship. Students can expect departmental funding to continue for up to four 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 course work over the various fields, while at the same time 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 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 nonthesis master's program includes thirty-three (33) semester hours of course work, with at least twenty-seven (27) of them on a letter-grade basis. A thesis program comprises thirty (30) semester hours, twenty-four (24) hours of course work and six (6) thesis hours, with twenty-four

(24) on a letter-grade basis. Master's candidates may take up to nine (9) hours outside the department. Up to six (6) semester hours may be transferred from another accredited institution.

Students must take one core seminar in two of the departments major fields: American politics, public policy, comparative politics, and international relations. All master's candidates must take six (6) semester hours of methodology. The departments 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.

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 program, 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 (37) semester hours, non-thesis program, including twenty-four (24) semester hours of course work, a twelve (12) semester-hour internship or practicum, and a one (1) semester-hour program planning course. Twelve (12) of the twenty-four (24) semester hours are in required courses, the remaining twelve (12) semester hours are chosen from a list of approved electives.

Doctoral Degree

The doctoral program in the Department of Political Science is a four-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 program of studies by selecting one major and two minor fields.

Course work requirements typically add up to fifty-four (54) semester hours: twelve (12) semester hours in the major field, nine (9) semester hours in each of two minor fields, twelve (12) semester hours in the methods sequence, three (3) semester hours credit for an independent research project, and nine (9) semester hours of electives. An advanced research seminar is offered in each of the major fields, and students are required to complete at least two of these. The independent research project is designed to give students hands-on experience with research prior to undertaking the dissertation. The goal is for the student to produce a paper of publishable quality and, in some cases, to produce a research grant proposal.

Once students have completed all their course work requirements (typically in the 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 by the beginning of their fourth year in the program. Twenty-four (24) 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
POT — Political Theory
PUP — Public Policy
SYD — Demography and Area Studies

Graduate Courses

Comparative Politics

CPO 5036. Politics of Developing Areas (3). Analyzes major forces shaping the politics of the third world, including geography, history, culture, economics, and international interdependence. Examines both the problems that must be overcome for the third world to gain parity with the first and the ability of the first world to facilitate that transition.

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 5557. Seminar in Comparative Government and Politics: Japan (3). Japan is studied from cultural and sociological as well as political perspectives. Various topics including Japans model of rapid development are covered along with her political institutions, political behavior, and foreign relations.

CPO 5644. Russian Politics (3). Introduces the student to the issues involved in conducting political science research on Russian politics from 1917 to the present. Critically examines the application of general comparative political theories to Russian politics.

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 (9) 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 5037. Development, Dependence, and Inequality (3). Analyzes the impact of the interaction between politics and economics on the distribution of wealth within and across nations. Various theoretical explanations of the role of international politics in the process that determines the distribution of wealth in the world will serve as its principle themes.

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 5090. Rational Choice and International Relations (3). An application of rational choice and the economic approach toward the study of human behavior, and to the field of international politics.

INR 5265. Russian Foreign Policy (3). Examines the history of Soviet and Russian foreign policy from 1917 to the present within the context of major theories of foreign policy.

INR 5275. Middle East Foreign Policy (3). Examines continuity and change within the foreign policies of Middle Eastern states, and the various techniques used to predict and explain them.

INR 5315. Foreign Policy Analysis (3). A theoretical analysis of the nature of the processes through which foreign policy is formulated and implemented. Several alternative models of the decision-making process, including rational, bureaucratic, organizational, psychological, and social-psychological are evaluated.

INR 5934r. Selected Topics (3). Varies with instructor and semester. May be repeated to a maximum of nine (9) 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 (9) 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 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 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 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 5208r. Selected Topics in Political Behavior (3). Varies with instructor and semester. May be repeated to a maximum of nine (9) semester hours.

POS 5227. The Executive (3). The political powers and exercise of power by chief executives in American government, with particular attention paid to the President and his relations with other branches of government.

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 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 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 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 5374. 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 5427. Legislative Politics (3). The behavior of legislators and the influences that shape that behavior in the legislative process.

POS 5456. Interest Groups and Policy (3). Focuses upon interest group activities, their impact upon public policy, and theories relevant to groups and organizations in the political process.

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 5698r. Selected Topics (3). Varies with instructor and semester. May be repeated to a maximum of nine (9) semester hours.

POS 5724. Economic Models of American Politics (3). Economic theories and concepts provide interesting insights into political behavior. The purpose of this course is to introduce students to economic models and conceptualizations of American politics in a nonmathematical fashion.

POS 5905. Applied Program Planning (1). (S/U grade only.) In consultation with the program director, the student creates a course work and internship/practicum plan for the major in applied American politics and policy.

POS 5945. Professional Practicum/Internship (12). (S/U grade only.) This course is designed to provide a structured opportunity for students to gain practical experience in the field of political management. Over the course of one semester, the student spends 300 hours in an internship or practicum and generates a descriptive and analytical product related to that activity.

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 5726. Social Choice Theory (3). This course is a survey of social choice theory with emphasis on utilizing those mathematical models to understand political phenomena. Develops insight into how formal theorists build analytical models and prove results.

POS 5736. 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.

POS 5737. Political Science Data Analysis (3). Prerequisite: POS 5736 or permission of instructor. 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.

POS 5746. Quantitative Analysis in Political Science (3). Prerequisite: POS 5737 or permission of instructor. Acquaints students with multivariate statistical techniques emphasizing regression analysis. Students are expected to apply these techniques to a research problem of their own selection.

POS 5747. Advanced Quantitative Analysis in Political Science (3). Prerequisite: POS 5746 or permission of instructor. Focuses on a variety of advanced techniques for quantitative political science research, including recursive and nonrecursive structural equation models, factor analysis and covariance structure models, and methods for time-series analysis.

POS 5749. Political Science Research Practicum (3). Prerequisite: POS 5746 or permission of instructor. 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 5750. 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.

Political Theory

POT 5934r, 5936r. Seminar in Political Thought: Selected Topics (3, 3). Varies with instructor and semester. Each course may be repeated to a maximum of nine (9) 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 5009r. Public Policy (3). To provide a broad survey of the major theoretical and empirical studies of public policy, including both the pluralist and elitist frameworks, systems analysis, institutional approaches to policy formulation, typologies of policy outcomes, agenda-setting, and policy implementation and impact. May be repeated to a maximum of six (6) semester hours.

PUP 5207. Environmental Politics and Policy (3). This course focuses on the actions taken by governments to protect and improve environmental quality, particularly in the United States. It examines the basic scientific principles that lie behind the need for environmental programs, and the characteristics of the major institutional actors in environmental policy making. United States environmental legislation and the consequences of these policies, as well as the role of the environment and environmental protection in the international arena are explored. No science background is required or assumed.

PUP 5335. Aging Politics and Policy (3). Surveys current public policies for older citizens, advocacy for the aged, the political behavior and participation of seniors, past aging policy developments, current problems, and future possibilities.

PUP 6910. Advanced Research in Public Policy (3). Prerequisite: POS 5746 or permission of instructor. 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 twenty-seven (27) semester hours.

POS 5919r. Supervised Research (1–5). (S/U grade only.) Only three (3) hours may apply towards master's degree. May be repeated to a maximum of five (5) semester hours.

POS 5940r. Supervised Teaching (1–5). (S/U grade only.) Only three (3) semester hours may apply towards master's degree. May be repeated to a maximum of five (5) semester hours.

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 (6) semester hours.

POS 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) 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 (12) semester hours.

POS 6980r. Dissertation (1–12). (S/U grade only.)

POS 8964r. Preliminary Doctoral Examination (0).

POS 8966r. Master's Comprehensive Examination (0).

POS 8976r. Master's Thesis Defense (0).

POS 8985r. Dissertation Defense (0).

SYD 5145. Population Policy (3). Also offered by the Department of Sociology. See description there.

POLITICAL THEORY
see Political Science

POPULATION
see Demography, Sociology

Department of PSYCHOLOGY

College of Arts and Sciences

Chair: Janet Kistner; *Associate Chair*: Berler; *Professors:* Bailey, Baumeister, K. Berkley, Brigham, Carbonell, Charness, Contreras, Ericsson, Glendenning, Joiner, Kistner, Lang, Madsen, Megargee, Rashotte, Smith, Stephan, Torgesen, Wagner, Weaver, Zwaan; *Associate Professors*: Boroto, Hyson, J. Johnson, Kelley, B. Licht, M. Licht, Lonigan, Meyer, Schatschneider, Wang; *Assistant Professors*: Eckel, J. Kline, Loney, Plant, Scheffers, Taylor; *Research Associates in Psychology:* Berler, Henderson; *Associates in Psychology:* Akbar, Sachs-Ericsson, Warmath; *Assistants in Psychology:* K. Kline, Murphy, Peeler; *Administrative and Professional:* Bigbie, Donaldson, T. Johnson, Saunders; *Associated Faculty:* Davis, Ferris, Kerr, Patrick, C. Rashotte, Tenenbaum, Walker, Wells; *Professors Emeriti:* Baker, Hokanson, Kennedy, Kenshalo, Miller

The primary goal of graduate study in psychology at The 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 clinical practice. 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, the National Science Foundation, and the National Institute of Justice. Total funding on an annual basis currently approximates $5,000,000.

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 physical facilities of the Department of Psychology occupy two interconnected buildings as well as other locations conveniently situated on campus. The main Psychology Building and interconnected Kellogg Research Building contain classrooms, offices, laboratories, and support facilities. The support facilities include fully staffed and equipped electronic, computer, and instrument design machine shops that are operated by the department. Staff provide training in the use of these facilities. Specialized equipment such as online computers, a neurohistological laboratory, graphic arts and photography, and electrically or acoustically shielded rooms, are available. Instruction in behavioral, physiological, and neuroanatomical techniques is provided both in formal course work and in laboratory settings. A new 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 which offers outpatient assessment and therapy services to the community. Clinical psychology students render these services under close supervision of faculty. Audio and videotaping equipment and therapy rooms with one-way mirrors permit direct observation of therapy cases by faculty and student therapists.

The department anticipates moving to a new state-of-the-art facility in 2005.

Financial Aid

The Department of Psychology makes every effort to provide financial assistance 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.

Programs

The Department of Psychology is organized into four 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), neuroscience (the study of the biological bases of behavior), cognitive psychology (the study of how humans process complex information received by the senses) and social psychology (human social behavior.)

The department also offers a doctoral degree in psychology with a specialty in applied behavior analysis (how behavior is influenced by environmental conditions.) A master's degree in psychology with a specialty in applied behavior analysis is offered at the Panama City campus.

Graduate education is provided by a large and diverse faculty via formal courses, seminars, individual tutorials, research collaboration, colloquia, and, in the clinical program, supervised clinical practica. Each program area is further described below.

Clinical Psychology

The PhD program in clinical psychology has been continuously accredited by the American Psychological Association since 1954. The program promotes a scientifically-based approach to understanding, assessing, and ameliorating cognitive, emotional, behavioral, and health problems, as well as provides concurrent, integrative training in clinical science and clinical service delivery so that graduates are prepared not only to apply current knowledge, theories, and techniques, but are also able and motivated to remain at the cutting-edge of the field.

There are no formal "tracks"; instead, all students are expected to master the basics of both psychology in general and of a broadly construed clinical psychology in particular. Beyond the second year, students can pursue specialization with 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 a match between their interests and those of the clinical faculty. Early and intense involvement in research is the cornerstone of a good clinical science program and to this end students (beginning in their first semester) complete a one-year research apprenticeship with the faculty member who recruited them. Students are encouraged to be continuously involved in ongoing research and it is common for some clinical graduate students to pursue research in collaboration with their major professors, as well as with other faculty and students.

An investigative approach to the understanding of psychopathology and the practice of clinical assessment and intervention is achieved through a variety of mechanisms including formal coursework and supervised practica. We strive to integrate clinical practice and research at every opportunity. Numerous community and campus facilities have a close liaison with the psychology department and provide for both practicum training and opportunities for research with diverse patient populations. The clinical program administers a psychology clinic where the faculty provides supervision for students working with children and adults from the surrounding communities. In addition, active clinical training/research programs are maintained with inpatient psychiatric hospital facilities, a comprehensive evaluation center for children, a juvenile treatment program, and a variety of other agencies. The clinical practice aspect of training culminates in a required, one-year pre-doctoral internship at an APA-approved setting. Students in this program have established a long history of success in competition for preferred internships across the country.

Cognitive Psychology

Cognitive psychology is the study of mental processes and their effects on human behavior. Cognitive processes include perception, attention, memory, language processing and thinking. Areas of research in which faculty engage include expert performance, skill acquisition, reading, memory, attention, language processing and cognitive aging. A variety of methods are used including eye tracking, event-related potentials, protocol analysis, reaction time and memory measures, and sophisticated statistical techniques.

Graduate students develop research and analytical skills while learning to coordinate basic research with theory development and application. Students actively work with faculty investigating such questions as the following: How do people learn skills so that they can read or even become elite performers in sports or music? How do they process language, attend, and remember? How does their cognitive behavior change as they get older?

Answers are pursued in class, in laboratory research, and in brown bag discussions and seminars. Students typically present research findings at professional meetings and publish papers in professional journals.

The **Florida Center for Reading Research** recently has been established. The center supports both basic and applied research in reading, and has ongoing studies of reading instruction and assessment in pre-school and elementary-age 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.

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 areas of research interest and expertise of the program faculty provide several possible directions for interested graduate students to pursue. One broad research program examines issues involved in prejudice and stereotyping, including anxiety in interracial interactions, responses to nonprejudiced social pressure, and the prejudice reduction process. Another broad line of work explores the various ways that psychological variables affect, or are affected by, the legal system. Much of this work focuses on the study of factors that affect the accuracy of eyewitness memory, with special attention given to the "own-race bias," the tendency for people to recognize faces of their own race better than faces of another race. Other research programs focus on various aspects of the self. Recent work has examined the interactions among self-control, self-regulation, and ego-depletion, as well as the relationship between self-esteem and violent behavior. Still another research program focuses on the behavioral, motivational, and emotional components of the self. Here, current projects include studies of how acts of self-control and self-regulation may affect subsequent acts of self-control, as well as studies of the effects of social rejection.

Developmental Psychology

The department offers a graduate-level major in developmental psychology designed to prepare students for positions as professors, researchers, and educators. For additional information on this major, including degree requirements, please refer to *http://www.psy.fsu.edu*.

Additional Developments

For additional information concerning these programs as well as additional program options and future developments, please refer to *http://www.psy.fsu.edu.*

Interdisciplinary Program in Neuroscience

The program in neuroscience provides interdisciplinary training leading to the degree of doctor of philosophy in neuroscience. Participating faculty hold appointments in the Departments of Psychology, Biological Science, or Nutrition, Food and Exercise Sciences. Students enroll in the department of their initial faculty advisor/major professor but may take neuroscience courses offered by other participating departments. Several of the Department of Psychology faculty are members of the neuroscience program, with doctoral directive status for the neuroscience PhD.

Neuroscience courses offered through the Department of Psychology include those with a PSB or EXP prefix. Interdisciplinary research training is available involving molecular, cellular, physiological and behavioral mechanisms in sensory biology (with special emphasis on chemical, auditory, visual and pain senses), synaptic physiology, learning and memory, neuroendocrinology/hormone-regulation, neural development and plasticity, neural control of food intake, neural control of reproductive behavior, circadian rhythms, cardiovascular regulation and the genetics of behavior. The program has two NIH funded training grants 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 psychology are available on the same basis as for the rest of the department. For more information, see the separate entry "Interdisciplinary Program in Neuroscience" in this *Graduate Bulletin* and the program in neuroscience website at *http://www.neuro.fsu.edu*.

Applied Behavior Analysis Doctoral Specialty

The department offers a doctoral degree in psychology with a specialty in applied behavior analysis; a master's specialty is offered at the Panama City Campus (see sub-section 'Master's Degree in Psychology with a Specialty in Applied Behavior Analysis [Panama City Campus]' in this chapter of the *Graduate Bulletin*.) Applied behavior analysis involves the functional analysis of complex human behavior in a variety of settings, and the design and development of contingencies of reinforcement to produce socially significant changes in performance. Recent research in this area includes work in elementary schools and hospitals, mental health and geriatric facilities, as well as business and industry settings. Research seeking better ways to manage disruptive behavior, teach new skills, improve productivity, and prevent injury is the focus of this specialty.

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 normally are accepted for enrollment only in the fall semester of each year. Completed applications are due by December 15th for all programs except neuroscience (January 15th) and the master's program in psychology with a specialty in applied behavior analysis (March 1st.) Applicants should contact the department to confirm deadlines, as they may change from one year to the next.

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 applicants 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*.

Predoctoral Programs

Core Curriculum

The core curriculum is designed to provide students with a broad range of knowledge in general psychology. The core provides students with training in content, method, and statistical analysis, and it provides the basic preparation for subsequent research and professional training.

Students take two of the following core courses: EXP 5508, 5406; PSB 5056; PPE 5055; SOP 5053; DEP 5165.

Students also complete one advanced statistics course. In addition, a basic statistics course is required if the student has not previously taken an introductory statistics course.

With permission from advisers, students who have completed comparable graduate course work at other institutions may request an exemption from the core course instructor.

Research Apprenticeship

First-year students work 10 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. The committee may waive the departmental core curriculum and/or thesis requirements and may recommend entry to the doctoral program without completion of the master's degree. Completion of alternative requirements may be specified by the committee prior to approval for entry to the doctoral program. **Note**: most program areas require completion of the master's degree prior to 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 requirements and research apprenticeship, 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:

1. A written preliminary doctoral examination or a theoretical/critical literature review paper plus oral exam; and

2. A dissertation research project.

Program Area Requirements

Program areas have minimum requirements beyond those established for the department; these must be completed prior to the doctoral degree and a time sequence is specified for some requirements. In addition, students work closely with their supervisory committees to develop an optimum combination of course work, research experience, and applied training to meet their professional goals.

Clinical Psychology Program

Clinical psychology students are required to obtain a master's degree. The preliminary doctoral exam for clinical students is a written examination. In addition, the clinical program requires students to complete an independent project which may take a variety of forms (e.g., a grant proposal) at any time prior to the defense of the dissertation prospectus.

The following courses, clinical practica, and one-year internship meet the requirements for graduate education in clinical psychology established by the American Psychological Association. Program requirements are reviewed periodically by the faculty and may change.

1. **General Core.** Students must take five of the six departmental core courses: SOP 5053; PSB 5056; DEP 5165; PPE 5055; and either EXP 5406 or 5508;

2. **Background.** PSY 5605;

3. **Determinants of Abnormal Behavior.** CLP 6169 and 5475;

4. **Research Methodology.** CLP 5375, EDF 5401 (satisfies departmental core requirement) plus one additional statistics course, and CLP 6920 (required every semester for clinical students in residence);

5. **Assessment.** PSY 5325 and 5326;

6. **Behavior Change.** CLP 5196 and 5475;

7. **Professional Ethics.** Ethical issues are an integral part of every clinical course and practicum in light of their central importance to the profession of clinical psychology;

8. **Advanced Seminars.** At least three advanced seminars or courses are required beyond those listed above. A strongly recommended seminar addresses issues in minority mental health;

9. **Clinical Practicum.** CLP 5941r and 5942r: a minimum of 550 hours are completed in the psychology clinic over a consecutive 12-month period beginning in the students second year in the program. Students also have the opportunity to gain additional supervised applied experience in community agencies that provide funding; and

10. **Internship.** PSY 6948.

Interdisciplinary Program in Neuroscience

Program curriculum is being revised. Please refer to *http://www.neuro.fsu.edu* for the most current requirements.

Cognitive Psychology Program

Program curriculum is being revised. Please refer to *http://www.psy.fsu.edu* for the most current requirements.

Social Psychology Program

Program curriculum is being revised. Please refer to *http://www.psy.fsu.edu* for the most current requirements.

Applied Behavior Analysis Doctoral Specialty

Program curriculum is being revised. Please refer to *http://www.psy.fsu.edu* for the most current requirements.

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 degree with a specialty in applied behavior analysis 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 become Certified Behavior Analysts in Florida. 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 (39) semester hours of psychology courses are required, including nine (9) semester hours of practicum. The courses include: EAB 5700, 5701, 5710, 5711, 5721, 5780, 5796, 5940, 5941, 5942, 6769; PSB 5056; DEP 5165. This program may be completed in six (6) 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 (12) semester hours of undergraduate and/or graduate courses in psychology prior to admission. Prerequisite courses are research methods, conditioning and learning, applied behavior analysis, and history and systems. Prerequisite courses must have been passed with a grade of "B–" or better. The first three courses listed above must be completed before the student begins the program. History and systems may be taken while enrolled in the program.

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. At least three letters of reference (a minimum of two should be from former professors);

4. A personal statement; and

5. Official transcripts of previous undergraduate and graduate coursework.

The application deadline is March 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, The Florida State University, Tallahassee, FL 32306-1270; (850)-644-2499; grad-info@psy.fsu.edu*, or visit the website at *http://www.psy.fsu.edu*.

Definition of Prefixes

CLP — Clinical Psychology
CYP — Community Psychology
DEP — Developmental Psychology
EAB — Experimental Analysis of Behavior
EXP — Experimental Psychology
PPE — Psychology of Personality
PSB — Psychobiology and Neuroscience
PSY — Psychology
SOP — Social Psychology
SPS — School Psychology

Graduate Courses

General

PSY 5605. History and Systems of Psychology (3). 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: Permission of instructor. 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 permission of instructor. 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 permission of instructor. Behavior analysis methods including stimulus control, shaping, chaining and imitation are covered 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 permission of instructor. 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 permission of instructor. 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 permission of instructor. 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 permission of instructor. 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 permission of instructor. Details practical methods for designing and executing successful behavior analysis research. Reviews current methodology and critiques studies in the literature.

EAB 5940, 5941, 5942. Applied Behavioral Analysis Practicum (3). (S/U grade only.) Prerequisites: EAB 5700, 5701, 5780. A 20 hour per-week supervised practicum in the application of applied behavior analysis.

EAB 6769r. Seminar on Skinners Theory of Behaviorism (3). Prerequisites: EAB 3703 and EXP 3422 (or equivalents) or permission of instructor. 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 (6) semester hours.

Clinical—Personality

CLP 5195. Theories of Psychotherapy (3). Contemporary theories and systems, empirical support, practical issues, and ethical issues in the area of psychotherapy.

CLP 5196. Techniques of Behavioral Change (3). Prerequisites: CLP 6169 and permission of instructor. Therapeutic strategies and promising techniques for behavioral change of specific referral problems in clinical practice.

CLP 5375. Concepts and Methods of Clinical Psychology (3). Prerequisite: Permission of instructor. Methods, designs, evaluation of treatment outcome and program evaluation research. Ethical and practical considerations of clinical research.

CLP 5475. Child Psychopathology and Intervention (3). Prerequisite: Permission of instructor. Focuses on the assessment and diagnosis, etiology, and treatment of a number of psychological disorders of childhood.

CLP 5624. Ethics and Fundamentals of Professional Practice (3). (S/U grade only.) Prerequisites: CLP 6169; PSY 5325, 5326; permission of instructor. 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 5932. Law and Ethics (3). Prerequisite: Permission of instructor. Ethical and legal issues of professional practice and research in psychology. Teaches the code of ethics governing psychologists and provisions of civil and criminal law as they affect psychologists, especially in the role of expert witness.

CLP 5941r 5942r. Clinical Practicum: Psychological Evaluation (one to three [1–3] hours each). (S/U grade only.) Prerequisites: PSY 5325, 5326; CLP 6169. A fifteen (15) hour per week practicum in intake, assessment, and therapy including direct client contact, supervision, and staffing. Each course may be repeated to a maximum of twenty-four (24) semester hours. A maximum of six (6) credits of CLP 5941r and/or CLP 5942r may be taken in the same semester.

CLP 6169. Abnormal Psychology for Graduate Students (3). Prerequisite: Permission of instructor. Theoretical and empirical perspectives on the biopsychosocial problem of human abnormality. Includes issues of definition, classification, diagnosis, and etiology, as well as treatment implications.

CLP 6349r. Seminar in Clinical Theory (3). Prerequisite: Permission of instructor. Traditional and contemporary approaches. May be repeated to a maximum of nine (9) semester hours.

CLP 6920r. Current Issues in Clinical Psychology (1). (S/U grade only.) Prerequisite: Permission of instructor. Weekly lectures on research and professional topics in the field of clinical psychology. May be repeated to a maximum of six (6) semester hours.

CLP 6944r, 6947r Clinical Practicum: Change of Behavior (1–3, 1–3). (S/U grade only.) Prerequisites: PSY 5325, 5326; CLP 6169. A practicum in psychotherapy and behavior change techniques. Each course may be repeated to a maximum of thirty-six (36) semester hours. A maximum of six (6) semester hours credits of CLP 6944r and/or CLP 6947r may be taken in the same semester.

PPE 5055. Personality Theory (3). Prerequisite: Permission of instructor. An overview of personality theory and supportive research in the contemporary literature

PSY 5325. Assessment I (3). Prerequisite: Permission of instructor. Theory and techniques in construction, use, and evaluation of psychological assessment procedures.

PSY 5326. Assessment II (3). Prerequisites: PSY 5325; permission of instructor. Introduction to intelligence and personality testing.

PSY 6940r. Psychological Clerkship (3–6). (S/U grade only.) Prerequisite: Permission of instructor. Supervised practical experience in the administration and interpretation of psychological tests, therapy, and consultation. May be repeated to a maximum of twelve (12) semester hours.

PSY 6948r. Psychology Internship (1–6). (S/U grade only.) Prerequisite: Permission of instructor. Off-campus internship for one year, two thousand hours. May be repeated to a maximum of six (6) semester hours.

Human Learning and Cognition

EXP 5508. Cognition and Perception (3). 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). Current scientific knowledge in areas of human intellectual functioning: perception, attention, memory, language, and reasoning. May be repeated to a maximum of six (6) semester hours.

EXP 6920r. Issues in Cognitive Science (1). (S/U grade only.) Pre- or corequisite: EXP 5508. The goals of this course are 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 (10) semester hours.

Life-Span Development

DEP 5165. Developmental Psychology (3). Prerequisite: Permission of instructor. Covers the development of children's cognitive and social behavior from infancy to the beginning of adolescence.

Psychobiology /Neuroscience

EXP 5406. Conditioning and Learning (3). A survey of contemporary issues in animal learning. Concentrates on methods, data, and theory in areas of classical conditioning and instrumental training.

EXP 5717. Animal Psychophysics (3). Study of sensory processes in animals using rigorous behavioral techniques.

PSB 5056. Biological Psychology (3). 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 5216. Anatomy of the Nervous System (3). Structure and function of lower portions of the nervous system: motor and sensory systems, internuncial neurons, cranial nerves, and reticular formation.

PSB 5218L. Neuroanatomy Laboratory (1). Assignment to one or several neurobehavioral laboratories to participate in ongoing research which emphasizes the interrelationships between behavioral and emotional observations.

PSB 5231L. Comparative Neuroanatomy Laboratory (1). This laboratory course examines the structure and function of the nervous system of the primate, rodent and avian brains.

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 6059r. Seminar in Physiological Psychology (3). Topical seminars in physiological psychology, varying as to offering faculty. May be repeated to a maximum of nine (9) semester hours.

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 (8) semester hours.

PSB 6920r. Neuroscience Colloquium (1). (S/U grade only.) Lectures and discussions on research in neuroscience. May be repeated to maximum of four (4) 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 (8) semester hours.

Social

SOP 5053. Social Psychology (3). Survey of content areas in social psychology. Attention to social psychologists' approaches to problems and current findings.

SOP 6848. Seminar in Psychology and Law (3). Prerequisites: SOP 5053; permission of instructor. Seminar in the application of psychological principles and research findings to important issues in the legal system.

SOP 6920r. Current Issues in Social Psychology (1). (S/U grade only.) Pre- or corequisite: SOP 5053. 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 (10) semester hours.

SOP 6939r. Seminar in Social Psychology (3). Topical seminars in social psychology that vary according to offering faculty. May be repeated to a maximum of twelve (12) semester hours.

Multiple Area Courses

PSY 5908r. Directed Individual Study (1–3). (S/U grade only.) Supervised individual study project on selected topic. May be repeated to a maximum of sixteen (16) semester hours.

PSY 5916r. Selected Research Topics (3). 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 (9) semester hours.

PSY 5917r. Supervised Research (1–5). (S/U grade only.) A 10 hour per week research apprenticeship under the direction of a research professor. No more than three (3) semester hours may be counted toward the master's degree and five (5) semester hours toward the doctoral degree.

PSY 5947r. Supervised Teaching (1–5). (S/U grade only.) A teaching apprenticeship under the direction of a faculty member, involves observed teaching and teacher observation. No more than three (3) semester hours may be counted toward the master's degree and five (5) semester hours toward the doctoral degree.

PSY 5973r. Thesis (1–6). (S/U grade only.) Supervised research on an original research project submitted in partial fulfillment of master's degree requirements. A minimum of six (6) 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 (3) semester hours is required. May be repeated to a maximum of twelve (12) semester hours.

PSY 6919r. Seminar in Current Research Topics (1–3). May be repeated to a maximum of nine (9) semester hours.

PSY 6980r. Dissertation (1–12). (S/U grade only.) Supervised research on an original research project submitted in partial fulfillment of doctoral degree requirements. A minimum of twenty-four (24) semester hours of credit is required for the doctoral degree.

PSY 8964r. Preliminary Doctoral Examination (0).

PSY 8966r. Master's Comprehensive Examination (0).

PSY 8976r. Master's Thesis Defense (0). (S/U grade only.)

PSY 8985r. Dissertation Defense (0).

PSYCHOLOGY FOR COUNSELING
see Educational Psychology and Learning Systems

Reubin O' D. Askew School of PUBLIC ADMINISTRATION AND POLICY

College of Social Sciences

Director: William Earle Klay; *Professors*: Askew, Berry, Bowman, Bradley, Chackerian, deHaven-Smith, Feiock, Guy, Klay, Reid; *Associate Professors*: Brower, Coursey; *Affiliate Faculty*: Imershein; *Visiting Professors and Adjunct Faculty*: Alam, Crispo, Croushorn, Easterling, French, Germany-Griggs, Greenfield, Jurand, Lynch, Parry; *Professors Emeriti*: Grizzle, Hartsfield, Page, Sherwood, Waldby

Public administration, whether taken as a second degree or as an area of specialization within other degree programs, adds a new dimension to career competencies, enhancing the student's career mobility, flexibility, and opportunities. Graduate study provides professional preparation for careers in government, higher education, private consulting, and in nonprofit organizations and can be pursued in several ways. The school offers two graduate degree programs: the master of public administration (MPA) and the doctor of philosophy in public administration (PhD). The master's program prepares students for management roles in a variety of public sector and nonprofit environments. The doctorate is designed to prepare students for college and university teaching, advanced research, administrative practice, and policy analysis. The school also offers dual degrees with the College of Law (master of public administration/juris doctorate [MPA/JD]), the School of Social Work (master of public administration/master of social work [MPA/MSW]), the School of Criminology and Criminal Justice (master of public administration/master of science in criminology [MPA/MSC]), Department of Urban and Regional Planning (master of public administration/master of science in planning [MPA/MSP]) and with the Interdisciplinary Program in Health Policy Research (master of public administration/master of science in health care research [MPA/MS]). Certificates in financial management, general public administration, human resource management, emergency management, and health services administration are also available. Additional information (such as handbooks and syllabi) is available on the Askew Schools home page at *http://askew.fsu.edu*.

Master of Public Administration

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 preservice 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 on-line or from the school) or the MPA Director.

The MPA requires successful completion of forty-two (42) semester hours. Those students with less than one year of acceptable professional experience will be required to complete an additional three (3) 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 course work arranged in consultation with a faculty adviser.

MPA Core Course Requirements

1. **Substantive Core Courses** (twelve [12] 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)

2. **Methodological Courses** (six [6] semester hours):

PAD	5700	Research Design in Public Administration (3)
PAD	5700L	Research Design Laboratory (0)
PAD	5701	Quantitative Analysis in Public Administration (3)
PAD	5701L	Quantitative Analysis in Public Administration Laboratory (0)

3. **Internship and Action Report** (three to six [3–6] 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.

a. Local government;

b. Leadership and strategic management;

c. Human resource management;

d. Public budgeting and financial management;

e. Public information management;

f. Policy analysis and evaluation management;

h. Health services administration and policy;

i. Emergency and environmental management; and

j. 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 course work.

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)

Electives

GEO	5345	Disaster Preparedness and Hazards Mitigation (3)
GEO	5159	Geographic Information Processing and Systems (3)
GLY	5886	Geologic Hazards Assessment (3)
URP	5422	Coastal Planning (3)
PAD	5352	Environmental Policy and Management (3)
PAD	5935r	Seminar in Public Administration: Selected Topics [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)
ECO	5516	Public Finance (3)
PAD	5327	Public Program Evaluation (3)
PAD	6705	Analytic Techniques for Public Administrators (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.

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 special students in a simplified process which does not require formal admission to graduate studies. Up to twelve (12) hours of credit earned in this program may later be applied to the MPA upon admission to that program.

The certificate requires eighteen (18) 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

A certificate program in the area of health policy and administration is available. Consisting of the three core courses identified below, plus two 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

PAD	5846r	Health Policy and Public Administration (3)
PAD	5935r	Seminar in Public Administration: Selected Topics [Health Care Finance] (3)
SYO	5405	Health Institutions and Social Policy (3)

Elective Courses

HSC	5603	Models of Health Behavior (3)
PAD	5935r	Seminar in Public Administration: Selected Topics [Health Policy Research] (1–3)
SOW	5603	Social Work in Health Settings (3)
SYO	5545	Social Institutions and Complex Organizations (3)
URP	5520	The U.S. Health Care System (3)

URP	5521	Epidemiological Bases of Health Planning (3)
URP	5522	Regulatory Aspects of Health Care (3)
URP	5523	Resource Allocation in Health Policy and Programs (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 (18) 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	5106	Public Organizations (3)
PAD	5419	Issues in Human Resource Management (3)
PAD	5427	Public Labor Relations (3)

Elective Courses

ADE	5083	Human Resource Development (3)
ADE	5186	Program Development in Adult Education (3)
ADE	5385	Adult Learning (3)
LAW	7544	Labor Relations Law in the Public Sector (2)
PAD	5041	Ethics and Public Administration (3)
PAD	5327	Public Program Evaluation (3)
PAD	5605	Administrative Law (3)
PAD	5457	Quality Management Systems (3)
PAD	6107	Seminar: Public Organizational Development (3)
PAD	6115	The Executive (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.

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 (45–75) semester hours in the following areas:

MPA Substantive Core, Methodological Core, and Administrative Law

Twenty-four (24) 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 The Florida State University or at another recognized university.

PhD Core

Twenty-four (24) semester hours of the following:

Substantive Courses

Twelve (12) 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 (12) semester hours:

PAD	6705	Analytic Techniques for Public Administrators (3);
PAD	6707	Logics of Inquiry (3); and

Methods Electives (six [6] semester hours).

Specialization in Public Administration

Fifteen (15) semester hours specializing in one of the following fields of public administration:

1. Human resources and training;
2. Financial resources administration;
3. Institutions and organizations;
4. Policy; or
5. Other as arranged.

Political Processes

Six (6) semester hours, subject to waiver by PhD director.

Professional Topics

Zero (0) semester hours, S/U grade only.

All courses in the PhD core requirements must be taken in the school except for comparative administration which may be taken elsewhere. Students may be required to pass a methods proficiency examination covering the material in the MPA methods core before they will be admitted to PAD 6705, Analytic Techniques for Public Administrators. Interdisciplinary specializations related to student career goals are also possible.

Diagnostic Review

The school's PhD core field committee will examine the performance of each student after the completion of eighteen (18) semester hours of graduate work at The Florida State University but no later than the end of the second year. The examination shall include a review of grades, and where appropriate, a written examination, seminar papers and other evidence of potential to complete comprehensive examinations and dissertation.

Preliminary Examination, Supervisory Committee and Program of Studies, Dissertation Prospectus and Defense

All doctoral students must form a supervisory committee and file an approved program of studies at least six months before the preliminary examination, which is taken after all course work has been completed. After passing the preliminary examination, a candidate must submit a prospectus for the dissertation for approval 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 and Policy

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. Ethics and Public Administration (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 macroorganizational 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 5352. Environmental Policy and Management (3). Survey of the political and administrative nature of environmental quality. Includes the historical and contemporary context of policy development and implementation. Emphasizes actors in the decision-making process and institutions of government. Discusses contemporary problems and reform issues.

PAD 5397. Foundations of Emergency Management (3). This course is designed to introduce students to the fundamental concepts, theories, principles and practices of emergency managment.

PAD 5398. Emercency Management Programs, Planning, and Policy (3). This course examines functional demands that emergency managers should be aware of in crafting emergency managment 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 organzations 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 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 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.

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 (9) semester hours. PhD students may exceed the nine (9) hour maximum with approval of major professor.

PAD 5915r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours, but no more than three (3) hours may be applied to the master's program.

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 (5) semester hours.

PAD 6025. Theoretical Perspectives in Public Policy (3). Prerequisite: PhD student or permission. Course addresses topics related to substance and methods of public policy. Theoretical frameworks include:welfare/economics/political science and organization theory.

PAD 6054. Intellectual History and Future of Public Administration (3). Prerequisite: PhD student or 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 permission of instructor. 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 permission of instructor. 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 permission of instructor. 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 6836. Comparative/Development Administration (3). Normative, analytic, and management problems in a variety of administrative systems and cultural contexts.

PAD 6908. Action Report (3). Prerequisites: All prior required MPA course work and permission of instructor. 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 6930r. Professional Topics in Public Administration (0). (S/U grade only.) This course is offered at zero (0) credit hours as an administrative mechanism to insure 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 (12) semester hours.

PAD 6980. Dissertation (1–12). (S/U grade only.)

PAD 8964. Preliminary Doctoral Examination (0). (S/U grade only.) For students registering to take their doctoral examination.

PAD 8985. Dissertation Defense (0). (S/U 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 Elementary and Early Childhood Education

RECREATION AND LEISURE SERVICES ADMINISTRATION
see Sport Management, Recreation Management and Physical Education

REHABILITATION COUNSELING
see Special Education

Department of RELIGION

College of Arts and Sciences

Chair: John Kelsay; *Professors:* Corrigan, Kelsay, Sandon, Twiss; *Associate Professors:* Erndl, Levenson; *Assistant Professors:* Burkes, Cuevas, Kalbian, Kangas, Kavka, Koehlinger; *Professors Emeriti:* Carey, Jones, Moore, Rubenstein, Wellborn

The Department of Religion at The Florida State University offers the MA and PhD in the study of religion. In addition, department faculty participate in the doctoral program in humanities.

The MA and PhD in the study of religion combine broad exposure to the field with the development of a particular area of expertise. The doctoral program in humanities (with a religion concentration) is intended for students wishing to combine the study of religion with an interdisciplinary approach to the humanities. Those wishing to obtain information about the MA and PhD in the study of religion should contact the Department of Religion. Those interested in the PhD in humanities should refer to the "Program in Humanities" entry of this *Graduate Bulletin*.

Requirements

The minimum criterion for admission to the M.A. program is a "B" average on all undergraduate work or a combined score of 1000 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.

For the PhD, applicants should have an MA in religion or its equivalent and outstanding GPA and GRE scores.

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

MA students concentrate in one of four areas: religions of western antiquity; religions of South Asia; American religious history; or religion, ethics, and philosophy. Students indicate their intention to work in a particular area at the outset of their first semester; they may change concentrations prior to the third semester of coursework.

During their course of study, students will meet several general requirements. These include: thirty-three (33) semester hours of coursework 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 comprehensive examinations, and additional work in foreign languages. Students should contact the department office to obtain more detailed information about faculty associated with and requirements for particular areas of concentration.

Completion of the MA usually requires four semesters; in some cases, requirements may be met in three semesters.

Doctorate in Religion

Requirements for the PhD program include twenty-four (24) semester hours of approved coursework beyond the 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: religion, ethics, and philosophy; religions of Western antiquity; religions of South Asia; American religious history. Students should contact the department office to obtain information about these matters.

Definition of Prefix

REL — Religion
SAL — Sanskrit

Graduate Courses

Note: students should contact the Department of Religion office for the most up-to-date information concerning course offerings.

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 (9) semester hours.

REL 5204r. Readings in Classical Hebrew Texts (1–3). Prerequisites: HEB 2230, or instructor's consent. 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 (12) 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 (12) semester hours.

REL 5297r. Seminar: Biblical Studies (3). May be repeated to a maximum of nine (9) semester hours.

REL 5305r. Seminar: History of Religions (3). May be repeated to a maximum of nine (9) semester hours.

REL 5326. Religions of the Ancient Near East (3). The religious traditions of the ancient Near East, including Egypt, Mesopotamia, and Syria/Palestine, from earliest historical times to the onset of the Hellenistic Age.

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 (12) semester hours.

REL 5329. Religions of the Graeco-Roman World (3). The religions of the Graeco-Roman world with special emphasis on traditional religious forms, mystery religions, and developments in philosophy. Some attention will be given to Judaism, Christianity, and Gnosticism in their broader social, cultural, and historical contexts.

REL 5339. 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 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 (12) semester hours as topics vary.

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 (9) 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 5535. Christianity in Early Modern Europe (3). This course examines the thought, movements, lifestyles, and literature of European Christians from the 14th century to the 17th.

REL 5545. Modern Protestantism (3). The development of the Protestant traditions in the modern era. Emphasis will be on the innovative responses made in Protestant thought and practice to the key developments in culture and society.

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 Enlightment to to the birth of the State of Israel.

REL 5675. Gender and Judaism (3). Examines the roles of men and women in various Jewish communities and the responses of contemporary Jews to feminist initiatives and critiques.

REL 5906r. Directed Individual Study (1–3). May be repeated to a maximum of twelve (12) 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 philosopical concepts and the culture of ancient Buddhist India. May be repeated to a maximum of twelve (12) semester hours.

REL 5911r. Supervised Research (1–3). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

REL 5915r. Tutorial in Sanskrit Texts (1–3). Prerequisite: SAL 4101, or its equivalent. Readings in Sanskrit of selected religious texts. Topics will vary by semester. May be repeated to a maximum of twelve (12) 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 (12) semester hours.

REL 5940. Supervised Teaching (3). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree.

REL 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) 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 (12) 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 (12) 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 (12) 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 (12) 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 coursework and are preparing for their examinations. May be repeated to a maximum of twenty-four (24) semester hours.

REL 6980r. Dissertation (1–12). (S/U grade only.) May be repeated to a maximum of twenty-four (24) semester hours.

REL 8964r. Preliminary Doctoral Examination (0). (S/U grade only.) May be repeated in the same semester.

REL 8966r. Master's Comprehensive Examination (0).

REL 8976r. Master's Thesis Defense (0).

REL 8985r. Dissertation Defense (0). (S/U grade only.) May be repeated in the same semester.

SAL 5230, 5231. 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 RISK MANAGEMENT/ INSURANCE AND REAL ESTATE AND PROGRAM IN BUSINESS LAW

College of Business

Chair: Dean H Gatzlaff; *Professors:* Boggs, Carson, Corbett, Diskin, Eastman, Gatzlaff, Maroney, Marshall, Sirmans, Stauber, Vickory; *Assistant Professors:* Cole, Dumm, McCullough; *Assistant in Business Law and Real Estate:* Woodyard; *Payne H. and Charlotte Hodges Midyette Eminent Scholar in Risk Management and Insurance:* Carson; *Robert L. Atkins Memorial Professor in Risk Management and Insurance:* Eastman; *Kenneth G. Bacheller Professor of Real Estate:* 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:* Marshall

Doctoral Program

The College of Business offers a doctoral program in business administration and a master's program in management with a major in 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.

On-Line Master's Program

The insurance major for the master's program is designed for 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.

Requirements

The master's degree with a major in insurance requires completion of thirty-three (33) semester hours of graduate level coursework. The doctoral program primary area coursework consists of six (6) required courses, as well as support area work and the analytical and research tools courses. Typical support areas for risk management and insurance majors include real estate, management information systems, and finance, 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 Environment of Business (3). Will create an awareness of the laws and of the legal, political, and social institutions which impact upon business activity. Will emphasize public law and governmental regulation. Landmark legislation and judicial decisions will be examined.

REE 5045. The Real Estate Process (3). Introduction to general principles of real estate as both a product and a process; relationship of real estate system to basic functional areas of business.

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 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 (9) semester hours when topics change.

RMI 5011C. Fundamentals of Risk and Insurance (3). This course will develop concepts such as time value of money, statistical analysis, information technology, and management of risk exposure.

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 5011C. This course will analyze 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 5011C. This course will cover 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 5011C. This course is a survey of accounting and finance, financial statement analysis, and statutory requirements for insurance companies.

RMI 5810C. Personal Financial Planning (3). Prerequisite: RMI 5011C. This course will analyze 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 (3) hours may apply towards the master's degree. May be repeated to a maximum of five (5) 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 (3) 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 (3) hours may apply to the master's degree. May be repeated to a maximum of five (5) semester hours.

RMI 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours is required.

RMI 8966r. Master's Comprehensive Examination (0).

RMI 8976r. Master's Thesis Defense (0).

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 (5) 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 (5) semester hours.

RMI 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours is required.

RMI 8964r. Doctoral Preliminary Examination (0).

RMI 8985r. Dissertation Defense Examination (0).

RUSSIAN
see Modern Languages and Linguistics

Interdisciplinary Program in RUSSIAN AND EAST EUROPEAN STUDIES

College of Social Sciences

Director: Ljubisa S. Adamovich (Economics); *Professors:* Adamovich (Economics), Launer (Modern Languages and Linguistics), Macesich (Economics), Oldson (History), O'Sullivan (Geography), Wynot (History); *Associate Professor:* Efimov (Modern Languages and Linguistics); *Assistant Professor:* Grant (History)

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 course work 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 above listed 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 (33) semester hour course work program or a thirty (30) semester hour course and thesis program. Students selecting the first option will undergo comprehensive examinations on the course work 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 (6) of their required thirty (30) 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 course work below, so long as they take a minimum of eight (8) semester hours in history and six (6) semester hours each from the social science and arts and humanities tracks. However, students are encouraged to concentrate their course work as much as possible to develop a particular country and language competence. Moreover, while it is required to take course work 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 (8) semester hours in the thirty-three (33) semester hour program or six (6) in the thirty (30) 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 master of arts degree by demonstrating a reading proficiency in Russian, Serbo-Croatian, or some other east European language by either: 1) the completion of twelve (12) semester hours of college level course work in the chosen language with an average grade of at least 3.0 ("B"); 2) satisfactory performance on the Graduate School Foreign Language Tests of the Educational Testing Service; or 3) 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 further in their

language training to gain an effective competency in their chosen area language. Up to nine (9) semester hours of language study beyond the initial twelve (12) semester hours can be counted towards the degree requirements when taken under the appropriate 4000 and 5000 level course numberings. **Note:** German may be substituted by permission from the director.

Study Abroad Opportunities

Master's candidates are encouraged to participate in the summer programs in Russia or Eastern Europe offered through The Florida State University as a capstone for their degree program. These summer programs allow students to immerse themselves in the cultures they are studying. The St. Petersburg, Russia summer program administered through the Department of Modern Languages and Linguistics emphasizes language and cultural studies. A second option, the summer program in Eastern Europe, is centered around a series of policy studies seminars. The seminars emphasize comparative policy analysis, that is the study of the creation and development of public policies in Eastern European countries studied.

Note: descriptions of individual courses can be found under the departmental listings.

Russian and East European History

Minimum of **eigh**t (8) semester hours

EUH	5238	Rise of Nationalism (4)
EUH	5246	World War I: Europe, 1900–1918 (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** (6) semester hours

CPO	5036	Politics of Developing Areas (3)
CPO	5091	Core Seminar in Comparative Government and Politics: (3)
CPO	5644	Russian Politics (3)
CPO	5740	Comparative Political Economy (3)
CPO	5934r	Selected Topics (3)
CPS	4321	Conparative Policy Studies: Contemporary Southeast Europe (3)
CPS	5325	Joint Seminar in Comparative Resource Development I (3)
CPS	5424	Research Seminar in Comparative Managerial and Organizational Policies (3)
CPS	5454	Research Seminar in Science, Technology, and Environmental Policy (3)
CPS	5474	Research Seminar in International and Comparative Law (3)
ECO	5005	Economic Principles for International Affairs (3)
ECO	5705	International Trade (3)
ECO	5715	International Finance (3)
ECS	4333	Transition of Soviet and Eastern European Economies (3)
ECS	5005	Seminar in Comparative Economic Systems (3)
GEA	4554	Russia and Southern Eurasia (3)
GEA	5195r	Advanced Area Studies (3)
GEO	5425	Cultural Geography (3)
GEO	5465	Historical Geography (3)
GEO	5472	Political Geography (3)
GEO	5481	Military Geography (3)
INR	5036	International Political Economy (3)
INR	5088	International Conflict (3)
INR	5265	Russian Foreign Policy (3)
INR	5315	Foreign Policy Analysis (3)
INR	5938	Joint Seminar in International Affairs (3)
PAD	6836	Comparative/Development Administration (3)
SYP	5105	Theories of Social Psychology (3)
SYP	5305	Collective Behavior and Social Movements (3)

Arts and Humanities Track

Minimum of **six** (6) semester hours

ARH	5220	Early Christian and Byzantine Art (3)
ARH	5648	Art After 1940 (3)
MMC	5305	Comparative Systems of Mass Communication (3)
MUL	5854	Music of Igor Stravinsky (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	4410	Advanced Russian Conversation (3)
RUS	4421	Advanced Russian Grammar and Composition (3)
RUS	5415r	Graduate Russian Conversation and Comprehension (3) (S/U grade only.)
RUS	5845	History of the Russian Language and Reading of Old Russian Texts (3)
RUT	5115	Seminar: Russian Literature in English Translation (3)
RUW	5375	Russian Short Story (3)
RUW	5405	Old Russian Literature (3)
RUW	5445	Russian 18th-Century Literature (3)
RUW	5559r	Seminar in 19th-Century Russian Literature (3)
RUW	5579	Modern Russian Literature (3)
SEC	5900r	Studies in Serbo-Croatian Language and Literature (3)
SLL	3500	Slavic Culture and Civilization (3)
THE	4111	European Theatre History II (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 — Russian and East 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 (12) hours.

EUS 5910r. Supervised Research (1–3). (S/U grade only.) Subject varies with each student. May be repeated to a maximum of three (3) hours.

EUS 5971r. Thesis (1–6). (S/U grade only.) Topic varies with student. A minimum of six (6) semester hours credit is required.

EUS 8966r. Master's Comprehensive Examination (0).

EUS 8976r. Master's Thesis Defense (0).

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 SOCIAL SCIENCE

College of Social Sciences

Director: Robert E. Crew, Jr., Office of the Dean, College of Social Sciences

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 (36) semester hours of undergraduate course work in the social sciences. Candidates for the MA must meet the University's requirements of foreign language proficiency and must have six (6) hours of graduate study in an arts field (history courses fulfill this requirement).

Candidates for the master's degree in the ISS program must complete thirty-two (32) semester hours of course work. This course work 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 (12) to eighteen (18) hours must be taken in one field of social science (the major field) and not less than six (6) 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 Prefix

CPS — Comparative Policy Studies
ISS — Social Science: Interdisciplinary

Graduate Courses

CPS 5325. Joint Seminar in Comparative Resource Development I (3). Compares, researches, evaluates, and discusses major concepts and issues pertaining to the development of human and nonhuman resources.

CPS 5424. Research Seminar in Comparative Managerial and Organizational Policies (3). Comparative analysis of the political and administrative organization and their implications.

CPS 5454. Research Seminar in Science, Technology, and Environmental Policy (3). Researches the roles of science, technology, and environmental policy.

CPS 5474. Research Seminar in International and Comparative Law (3). Comparative analysis of the role of law.

CPS 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

CPS 5911r. Supervised Research (1–5). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated for a maximum of five (5) semester hours.

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 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 (6) semester hours.

ISS 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.

ISS 5942r. Supervised Teaching (1–3). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of three (3) semester hours.

ISS 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 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 (6) semester hours.

ISS 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

ISS 8966r. Master's Comprehensive Examination (0).

ISS 8976r. Master's Thesis Defense (0).

SOCIAL SCIENCE EDUCATION
see Middle and Secondary Education

SOCIAL SCIENCE AND EDUCATION
see Educational Leadership and Policy Studies

SOCIAL WORK

SCHOOL OF SOCIAL WORK

Professors: Bardill, Figley, Harrison, Mazza, McNeece, Smith, Thyer, Vinton; *Associate Professors:* Abell, Crook, Maxwell; *Assistant Professors:* Altholz, T. Gomory, Hinterlong, Rutledge, Ryan, Siebert, Tensley, Wilke; *Visiting Assistant Professors*: F. Gomory, Perry; *Faculty Administrators*: Berry, Graham, Lager, Maddox, Stanley; *Visiting Faculty Administrator:* Kearney; *Associate in Field Instruction:* Keroack; *Associate in Research:* Bax; *Assistants in Field Instruction:* Allen, Boone, Calohan, Detweiler, Schultz, Sheheen, Spring, Wilson, Yanke; *Assistant in Field Instruction and Academic Advising:* Mathis; *Associate in Social Work:* Cleveland, Lee

The School of Social Work offers programs of study leading to the degrees of: 1) master of social work, educating advanced practice social workers by acquiring competencies through two curricular concentrations: clinical social work and social policy and administrative practice; and 2) doctor of philosophy, which is designed to advance the social work profession through the development of researchers/scholars and educators. Doctoral students choose a concentration area of study from among social welfare administration or clinical social work.

For complete details of graduate degree requirements, plus a description of the school, its opportunities, and available financial assistance, refer to the "School of Social Work" chapter in this *Graduate Bulletin*, or refer to *http://ssw.fsu.edu.*

Definition of Prefix

SOW — Social Work

Graduate Courses

The School of Social Work regards courses accompanied by a "+" as clinical/direct practice 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 provides an understanding of interactions among human,biological, social, psychological, and cultural systems as they affect and are affected by human behavior. The impact of social and economic forces on individuals and social systems is emphasized. An ecosystems approach is adopted for this course with an emphasis on the theoretical, conceptual, and empirical foundations that consider all potential areas of environmental influence (e.g., social/political, cultural, socioeconomic within various contexts), including the larger society and culture, the community, the organization, small groups and the family. Close attention will be given to culture, gender, socioeconomic status, race, ethnicity, and sexual orientation.

SOW 5106. Human Behavior and the Social Environment II (3). This course focuses on the dynamics and behavior of task groups, organizations, and communities. Theoretical explanations of group and organizational behavior and community development are explored. Attention is given to the social and economic forces that affect group, organizational and community behavior and how these impact such groups as ethnic minorities, women, gays and lesbians, and disabled people.

SOW 5109+. Women's Issues and Social Work (3). This course is designed to acquaint students with the oppressive focuses that affect women throughout life and the role that social work plays in addressing these issues. Particular attention is given to the intersection 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, as well as the role of practitioners in enabling or empowering women also is 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 (DSM IV.) Treatment strategies and techniques are addressed. The course is also appropriate for students in counseling and other human service areas.

SOW 5153+. Human Sexuality (3). This course is a survey of issues and attitudes associated with human sexuality. Using a biopsychosocial perspective, emphasis is placed on the social, cultural, familial, and individual differences in sexual and reproductive attitudes, values and behaviors. Students are introduced to common sex-related issues and to the particular concerns of various sexually oppressed groups. Information also is provided about childhood sexual abuse and adult sexual violence and how these traumas relate to the intimacy issues those clients typically present in direct practice. Students have the opportunity to develop beginning skills of assessment and treatment of psychosexual problems.

SOW 5156+. Social and Emotional Aspects of Illness (3). This course considers illness from the perspectives of patients, their significant others, and their caregivers. Conditions such as cancer, cardiovascular problems, psychosomatic illness, and situations of the physically handicapped are discussed. Relevant for social workers as well as students in areas such as counseling, rehabilitation, food and nutrition, and other human service professionals.

SOW 5158. Mediation and Conflict Resolution in Social Work (3). This course explores a variety of principled approaches to conflict resolution in many settings and intergrates social work theory and mediation.

SOW 5214r. Policy Innovations in Social Welfare (3). A special topics seminar focusing on recent policy developments and innovations in such fields of practice as mental health, public health, child and family welfare, public welfare, and gerontology. The policies and politics of aging, minorities, and special populations may be covered in certain terms. May be repeated to a maximum of six (6) semester hours.

SOW 5235. Policies and Programs in Social Services (3). This course provides a beginning understanding of the relationship among social welfare, social policy and American society from a social work perspective. Particular attention is paid to social welfare policy analysis, the nature of our present social welfare system, and its impact on disadvantaged populations.

SOW 5238. Advanced Policy Analysis (3). Prerequisite: SOW 5235. This course addresses the procedures and processes of social policy development and analysis. Students will examine the definition, implementation, and evaluation of policies and their impact on a variety of client populations.

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). 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.

SOW 5324. Group Treatment in Social Work Practice (3). Prerequisites: SOW 5105, 5335, 5356. This advanced clinical course examines theoretical foundation 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 and legal aspects of group work.

SOW 5334. Organizational and Community System Change (3). Prerequisites: SOW 5345, 5371, 5435. This advanced SPA course is intended to increase students' competency in the analysis of organizational and community systems and to develop action skills required to promote change.

SOW 5335+. Theories and Models of Social Work Practice (3). Course introduces students to a range of theories and models within an ecological systems framework. The empirical base of each theory and model will be examined, along with application 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). Course introduces students to the theoretical foundations and practice techniques of poetry therapy with individuals, couples, families and groups.

SOW 5342+. Practice I: Social Work Practice with Individuals, Families, and Small Groups (4). Beginning course in social work direct practice with individuals, families, and small groups. Content includes: building relationships, assessment, contracts, crisis intervention, family systems and group techniques, recording, working with minority and women clients, and termination. Skill development component.

SOW 5344. Practice II: Social Work with Task Groups, Organizations, and Communities (3). This course is designed to examine the impact of organizations on service delivery systems and to develop group leadership and community organization skills, including networking and advocacy strategies.

SOW 5345. Advanced Social Services Administration (3). Prerequisites: SOW 5371, 5435. This course provides advanced understanding of organizational theory, including structure and process in social service organizations, environmental contexts, mission and goals, and organizational effectiveness. Students also develop skills in leadership, decision-making, strategic and client-centered management, and problem solving.

SOW 5353+. Marital and Couple Counseling in Social Work Practice (3). Prerequisite: SOW 5611. This course is an introduction to important theories, issues, and procedures of marital and couple intervention. Emphasis is given to the role of the professional social worker in the prevention and amelioration of marital and couple distress; opportunities for the refinement of practice skills through use of videotapes, exercises, and assignments are provided.

SOW 5356+. Social Work Practice (3). This course is designed to provide students with an understanding of the social work history, mission, values, ethics, and roles. In addition, the course reviews social work's domain, functions, and practice arenas.

SOW 5363+. Evaluation of Social Work Practice (3). This course is the second in the research component for clinical students. This advaced course emphasizes the useof empirically based methods to enhance social work practice in client assessment and evaluation. Other topics include measurement of client change, ethical issues, and implementation of evaluative strategies.

SOW 5364+. Theory and Practice of Psychodynamic Social Work (3). This advanced course is designed to provide social work students with practice theory and techniques within the framework of ego psychology and psychosocial therapy.

SOW 5365+. Behavioral Approaches to Social Work Practice (3). Reviews terminology and concepts of operant conditioning, respondent conditioning, and social learning theory. Focuses on the application of these principles to behavior change within the context of social work practice.

SOW 5366+. Social Networking and Case Management in Social Work (3). Introduces students to the theories and strategies of case management in the scheme of service delivery. Students are guided in examining the following: 1) case management from perspectives of history and theoretical underpinnings; 2) the role of the case manager in settings; and 3) contemporary issues and implications for the changing practice environment.

SOW 5367+. Theory and Practice of Crisis Intervention and Brief Treatment (3). This course introduces students to the theoretical foundations and practice models of crisis intervention and other forms of brief treatment.

SOW 5369+. Integrative Seminar in Advanced Social Work Practice (3). Corequisite: SOW 5535r. Helps graduating social work students integrate theoretical concepts with practice experience gained in the field. Explores students' ideas about the definition and components of direct service practice; the goal is for students to identify a model to guide their own professional practice.

SOW 5371. Dynamics of Social Services Systems (3). Prerequisite: SOW 5106. This advanced SPA course explores the historical development of social services systems and emphasizes relationships among organizations, communities, and governments. Topics include the context of social service delivery systems; social work's mission, values, and roles; conflict and collaboration strategies; and systems planning.

SOW 5372. Supervision, Consultation, and Staff Development in Social Work (3). Emphasizes concepts, strategies, and techniques used by social workers in practicing staff development, consultation, and supervision.

SOW 5376. Budgeting and Finance in Social Services (3). Prerequisites: SOW 5371, 5435. This course emphasizes the political and technical skills of budgeting and financial management, resource development, via grant writing and fundraising; government contracting; budgeting skills; fiscal reporting; and payroll management.

SOW 5377. Personnel Administration in the Social Services (3). Prerequisites: SOW 5345, 5371, 5435. Course develops skills in personnel management in social services organizations. Attention is given to staff management approaches, supervision, staff recruitment and development, delegation, motivation, job design, employee assistance programs and equity issues.

SOW 5378. Data Management and Technologies in the Social Services (3). Prerequisites: SOW 5345, 5371, 5435. This advanced SPA course provides skills in computer applications, data collection and management, report writing, and communication technologies.

SOW 5383. Theory and Practice of Administration for the Human Services (3). A course in the knowledge and skills of social welfare administration, social planning, and community organization within an integrative construct which identifies and explores theoretical assumptions and bases.

SOW 5404+. Introduction to Social Work Research (3). By learning about quantitative and qualitative research methods, students in this course become critical consumers of the literature and better understand how research findings apply to social work practice, social policies, and programs.

SOW 5415. Measurement and Analysis in Social Work (3). This course will present basic concepts of the scientific method and the language of social work research. Concepts include becoming more discriminating consumers of social science research as applied to social work practice, such as attention to issues of social justice and cultural diversity in research design.

SOW 5435. Social Program and Policy Evaluation (3). This course is an advanced research class that is required in the social policy and administration concentration. Empirically based methods in evaluating social programs and policies are used. The course also explores how the evaluation of programs and policies can further the cause of social and economic justice for oppressed and disadvantaged groups.

SOW 5455. Grant Writing and Grant Management (3). Course focuses on finding sources of funds for research, demonstration and training projects, and skill development in the writing of grant proposals for such projects. Other topics include the management of grants and preparation for auditing and monitoring of programs.

SOW 5532r. Graduate Field Instruction I (5–10). (S/U grade only.) This is a required field placement for first-year graduate students and is typically taken concurrently with course work. The course provides supervised generalist practice in a variety of social work methods in an agency setting for a minimum of sixteen (16) hours per week.

SOW 5535r. Graduate Field Instruction II (6–12). (S/U grade only.) Prerequisites: SOW 4510, 5532. Corequisite: SOW 5369. This course requires field placement in an agency setting, and is to be completed by all graduate students at the end of their coursework. May be repeated to a maximum of twelve (12) 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 Instruction. May be repeated to a maximum of twelve (12) semester hours.

SOW 5603+. Social Work in Health Settings (3). Explores the characteristics of health and medical care programs in the United States and the parameters of social work practice within them. Addresses patterns and standards of service delivery, rural-urban differences, and racial/ethnic and gender considerations.

SOW 5611+. Family Counseling in Social Work (3). Assesses a number of theoretical models in family counseling. Presents assessment, interventive strategies and techniques.

SOW 5612+. Intensive Family Practice in Social Work (3). Prerequisite: SOW 5611. A seminar designed to help the advanced clinical social work student synthesize the conceptual base of family therapy with practice experiences gained during field placements. This course focuses on the unique application of family theory and interventive planning in specific social work practice settings.

SOW 5614+. Family Violence Across the Life Span (3). 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 incest, spouse abuse, rape and elder abuse, including treatment interventions, policy concerns and research issues. This course is appropriate for graduate students who wish to gain skill in detecting and responding to the following: incest situations; sexual assault survivors; and victims of spouse abuse or elder abuse. It is also appropriate for students wishing to gain skill in analyzing system responses to the issue of family violence, including the development of adequate policies, laws and law enforcement procedures.

SOW 5623+. Social Work With Black Families (3). Theories and research relevant to examining selected forces that affect black family structures and functions. Major considerations are given to misconceptions, misplaced emphases, myths about the black family in contemporary America and to appropriate models and strategies for intervention.

SOW 5628+. Mental Health of Diverse Populations (3). This course focuses on the circumstances of minority group members and women in contemporary American society and the effects of these circumstances on their mental health.

SOW 5635+. The Social Worker in the Public School System (3). Designed to give students an in-depth understanding of current school social work practice; focuses on the multidisciplinary team approach, alternative models of service delivery, the impact of Florida and federal legislation, and the characteristics of client problems encountered in the field.

SOW 5646+. Aging and Old Age: Social Work With the Aged (3). Designed as an introduction to the field of aging. Purposes include increasing students' awareness of their own attitudes toward aging and the aged, dispelling myths and stereotypes about the aged, and assessing past and present efforts to meet the needs of the elderly.

SOW 5655+. Social Work with Children and Adolescents (3). Increases knowledge and understanding essential for effective therapeutic interventions in the psychological and behavioral disorders of children, and develops special skills in selected intervention techniques and modalities in working with children in a variety of professional roles.

SOW 5656+. Child Welfare Practice (3). Focuses on advanced social work practice in child welfare to help students develop the knowledge, skills, and attitudes/values required for social work practice in foster care, adoptions, and protective services. Special attention is given to needs of minority population.

SOW 5659. Mental Health and Child Welfare (3). This course provides students with the knowledge and skills related to the theory, research and implications of child and adolescent maltreatment in child development and psychopathology. Course content is presented within the context of child welfare practice. Issues related to individuals, families, groups, and communities are covered and attention is given to working with ethnic minorities, women, gays and lesbians, and disabled people.

SOW 5666. Juvenile Justice: A Social Work Perspective (3). This course is designed to provide students with an overview of the juvenile justice system. This includes, but is not limited to the following: the history of the juvenile justice system; the juvenile court system; the role of law enforcement; policy development and implementaion; community issues involving youth; and the prevention and treatment of delinquency. Students also gain a first-hand perspective on these issues during required visits to various community agencies and organizations.

SOW 5671. Mind/Body, Medicine (3). This advanced graduate course seeks to explore and understand basic concepts and skills in how mental function relates to healing and health promotion, as viewed in the Family System Context.

SOW 5683+. Mental Retardation: Social Work Practice and Issues (3). Identifies policies, regulations, proposed legislation, or laws dealing with the problems of mental retardation and developmental disabilities. Addresses the major research contributions to the field of retardation and the implications of this research for practice. Focuses on the interdisciplinary system of services needed by the developmentally disabled.

SOW 5688. Living with AIDS: Prevention, Intervention and Care (3). Course provides a comprehensive overview of the biopsychosocial implications of HIV/AIDS-related illness. Research and policy implications are reviewed, with a focus on the roles of service providers responding to the needs of severely impacted groups.

SOW 5712+. Chemical Dependency Problems and Programs (3). Focuses on the physiological, psychological, and sociological aspects of substance abuse as a basis for explaining the behavior of the alcoholic and the alcoholic's family. Attention is given to a variety of treatment modalities and to the problems associated with alcoholism among special populations.

SOW 5908r. Directed Individual Study (1–4). (S/U grade only.) May be repeated to a maximum of six (6) 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 (3) 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 (9) semester hours as topics change.

SOW 5941r. Supervised Teaching (1–3). (S/U grade only.) Prerequisites: SOW 6696, recommendation of adviser, and consent of department. May be repeated to a maximum of five (5) semester hours.

SOW 5971r. Thesis (1–6). (S/U grade only.) Consent of instructor required. May be repeated to a maximum of (6) semester hours.

SOW 6358. Assessment Methods in Social Work Practice Research (3). Prerequisites: SOW 6492, 6693; EDF 5402. Corequisite: SOW 6694. A review of various clinical research assessment strategies for the evaluation of social work interventions.

SOW 6375Lr. Teaching Tutorial Laboratory (1–3). (S/U grade only.) This course is designed for doctoral teaching assistants with primary responsibility for an assigned undergraduate course. May be repeated to a maximum of five (5) semester hours.

SOW 6398. History and Philosophy of Social Welfare Services and Policies (3). This course examines a number of conceptual and analytical approaches to the study of American social welfare policy and services.

SOW 6399. Social Policy Analysis (3). This course analyses the theoretical and conceptual frameworks necessary for understanding public social policy.

SOW 6492. Theory, Design, and Problem Formulation in Social Work (3). A seminar in theory construction and research design.

SOW 6494. Advanced Research in Social Work (3). Prerequisite: SOW 6492. Seminar on methods of data collection and analysis are related to the general topics of measurement and interpretation of research findings.

SOW 6693. Theories and Models of Social Work Practice (3). Critical examination theoretical bases, conceptual frameworks, underlying assumptions, and the empirical state of direct social work practice models.

SOW 6694. Research Issues in Direct Practice (3). Prerequisite: SOW 6693. Comparative evaluation of various approaches to process and outcome research relevant for theory development in direct practice.

SOW 6696. Course Design and Curriculum Building in Social Work (3). Historical examination of social work education. Focus is on curriculum building for adult learners in social work education.

SOW 6697. Philosophies of Science in Social Work (3). Examination of the philosophical bases of various approaches to social work practice and research.

SOW 6904r. Reading in Social Work/Social Welfare (1–6). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

SOW 6909r. Directed Individual Study (1–6). (S/U grade only.) May be repeated to a maximum of twenty (20) 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 five (5) semester hours.

SOW 6936r. Dissertation Seminar (2–5). (S/U grade only.) Focuses on helping student with the development of dissertation prospectus. May be repeated to a maximum of six (6) semester hours.

SOW 6938r. Selected Topics in Social Work (3). May be repeated to a maximum of nine (9) semester hours as topics change.

SOW 6942r. Supervised Teaching (1–3). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

SOW 6945r. Family Therapy Practica (1–12). May be repeated to a maximum of twelve (12) semester hours.

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 (30) semester hours.

SOW 8964r. Preliminary Doctoral Examination (0).

SOW 8966r. Master's Comprehensive Examination (0).

SOW 8976r. Master's Thesis Defense (0).

SOW 8985r. Dissertation Defense (0).

SOCIOLOGICAL ANALYSIS
see Sociology

Department of SOCIOLOGY

College of Social Sciences

Chair: Isaac Eberstein; *Professors:* Armer, Eberstein, Fendrich, Hardy, Imershein, Isaac, Kinloch, Martin, Orcutt, Quadagno, Turner; *Associate Professors:* Brewster, Dahms, Ford, Padavic; *Assistant Professors:* Barrett, Heron, Lloyd, Reid, Reynolds, Schrock, Taylor; *Visiting Professor:* Carlson; *Professor Emeriti:* Hazelrigg, Nam; *Affiliate Faculty:* Chiricos, Miles, Milton, Papagiannis, Sly

The Department of Sociology offers graduate degree programs leading to the master of arts,master of science, and the doctor of philosophy degrees for the purpose of producing scholars with the skills and knowledge required for independent and significant research. While the major emphasis is on preparation for research, students are also prepared for teaching and positions in corporations and government. 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. 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: *http://www.fsu.edu/~soc.*

The Department of Sociology is located in the Bellamy Building in the heart of The 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 location of the **Center for Research on Aging**). 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

University requirements for graduate admission include a 3.0 grade point average (GPA) for the last two years of undergraduate study or a combined quantitative and verbal total of at least 1000 on the Graduate Record Examination (GRE). Students admitted in the sociology program typically meet both University requirements. Applicants must also have received a "C" or higher grade in a three (3) semester hour college-level course in statistics.

Applications for admissions in the sociology department are accepted year round. Most sociology students enter in the fall semester; therefore, some course sequences assume a fall starting date. While students may study part-time, most PhD students study full-time. Completed applications should be received for fall admission by **January 15th** to be considered for fellowships and by **February 1st** to be considered for departmental funding. Applications without funding expectations are accepted up to one month before the semester in which one is seeking entry. Application for admission may be made on paper or online (*http://www.fsu.edu/~soc*). Some materials must be submitted both to sociology and to the Florida State University Graduate School Admissions Office. Consult the departmental website (*http://www.fsu.edu/~soc*) 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 (33) semester hours are required, with a minimum of twenty-one (21) hours of graduate coursework 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 (15) semester hours of research methods and statistics courses must be taken. The following courses or approved substitutes are required:

SYA	5345	Introduction to Research Methods (3)
SYA	5406	Multivariate Analysis (3)
SYA	5455	Social Statistics and Data Analysis (3)

In addition, one three (3) semester hour course in research methods and statistics from sociology or another graduate department is required.

Elective courses: a minimum of eighteen (18) semester hours.

Traditional Master's Option

A minimum of thirty-four (34) semester hours is required, with at least twenty-one (21) 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	5125	Classical Social Theory (3)
SYA	5126	Contemporary Sociological Theory (3)
SYA	5345	Introduction to Research Methods (3)
SYA	5406	Multivariate Analysis (3)
SYA	5455	Social Statistics and Data Analysis (3)
SYA	5515	Sociological Research Practicum (1)
SYA	5516	Reporting Sociological Research (3)
SYA	5625r	Proseminar (0–3)
SYA	5971r	Master's Paper Research (1–6)

Elective courses: a minimum of twelve (12) 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 25 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 one of three areas of study;

3. Completion of a doctoral review paper;

4. Successful teaching of an undergraduate course; and

5. A doctoral dissertation.

Requirements

There are three areas of study from which PhD students may select major and minor substantive areas: doctoral students must complete three survey courses and two advanced research seminars in their major (primary) area and two survey courses and one Advanced Research Seminar in their minor (secondary) area.

Population/Demography. This area of study addresses issues related to birth (fertility, fecundity), marriage, health (morbidity), death (mortality), and migration, internal to the United States and globally.

Social Organization. This area of study includes two aspects of social organization: (1) politics/political economy/social movements addresses collective behavior and social change and economic and political (or state) conditions that mutually affect each other, with courses emphasizing historical and comparative analysis of nation-states and social movements; (2) work/organizations/economic sociology encompasses the sociology of work, work organizations, and the economy. Courses focus on changes in the labor market, economy, and workplace.

Social Stratification and Inequality. Examines structural patterns of inequality, including age, gender, sexuality, race/ethnicity, and social class with courses that review theories of inequality and allow students to focus on specific areas of their choosing.

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:

a. Six (6) semester hours of methods/statistics courses; SYA 5407, Advanced Quantitative Methods; and one of the following three options: SYA 5315, Qualitative Research Methods in Sociology; SYD 5135, Techniques of Population Analysis; SYA 5355, Comparative Historical Sociology, or another advanced methods course approved by the Graduate Program Director;

b. Three (3) semester hours of SYA 6660, Teaching at the College Level in Sociology;

c. Nine (9) semester hours of three (3) major area courses;

d. Six (6) semester hours of two (2) advanced research seminars in major area;

e. Six (6) semester hours of two (2) minor area courses;

f. Three (3) semester hours of one (1) advanced research seminar in minor area;

g. Theory preliminary exam;

h. Major area preliminary exam;

i. Doctoral review paper; and

j. Dissertation.

Definition of Prefixes

DEM — Demography
SYA — Sociological Analysis
SYD — Demography and Area Studies
SYO — Social Organization
SYP — Social Processes

Graduate Courses

Sociological Theory

SYA 5125. Classical Social Theory (3). An introduction to the works of major social theorists in the nineteenth and early twentieth centuries, concentrating mostly on Marx, Jurheim, 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 Perhins 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 5205. Theory Construction (3). An examination of theory construction and formalization issues such as epistemic premises and assumptions, modes of concept formation, modes and structures of explanation, implicated rules of evidence and data construction, and techniques of formalization. Usually a student completes SYA 5125 and 5126 or their equivalents prior to this course.

SYA 6934r. Selected Topics in Theory (3). Prerequisites: SYA 5125, 5126; or their equivalents. Specialized topics in social theory. May be repeated to a maximum of (9) semester hours.

Research Methods and Statistics

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 5345. 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 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 5345 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 5345, 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). Prerequisite: SYA 5345. Building on critical issues formulated in SYA 5345, 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 (1). (S/U grade only.) Prerequisites: SYA 5345, 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 (2) 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 (9) semester hours.

Demography and Population

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 (6) 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 (5) semester hours.

DEM 5930r. Special Topics in Demography (3). Prerequisite: SYD 5135. May be repeated to a maximum of nine (9) 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 (6) 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 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 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 5145. Population Policy (3). Seminar on issues of fertility, mortality, mobility, and population distribution policies, with attention to policy goals, means of implementation, and demographic consequences.

SYD 5215. Mortality (3). Reviews conceptual and theoretical approaches, measurement problems, analytical strategies, and literature in the areas of morbidity and mortality.

SYD 5225. Fertility (3). Addresses global trends in human fertility, conceptual approaches to the study of fertility, and policies that affect it.

SYD 5235. Population Mobility (3). A seminar focused on residential mobility. Theoretical, research, and methodological issues are reviewed critically.

Community, Race/Ethnicity, and Gender

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.

Social Organization

SYO 5105. 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 5126. Contemporary Family Theory (3). Reviews major theoretical perspectives on families and kinship such as functionalist, symbolic interaction, exchange, critical, radical, rational choice, and feminist theory.

SYO 5185. Family and Work Linkages (3). Focuses on changing relations between the family and work, with attention to issues such as how transformations in one sphere affect change in the other; how inequality between the sexes is socially constructed through work and family activities; and how work and family interconnections produce conflicts among family members.

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 nonmarket) 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 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 5505. Theories of Organizations (3). This seminar examines major theories of organizations and institutions in which they are embedded. Examines theoretical perspectives from bureaucratic, population ecology, and neo-institutional, to post-structural, alternative, feminist, and post-modern.

SYO 5535. Social Stratification (3). This seminar reviews theories of inequality in comtemporary 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 5545. The Changing Workplace (3). The seminar analyzes changes in the form and practices of organizations relative to control, cooperation, jobs and industries, and labor processes. It addresses workplace effects on members' lives and members' use of work organizations for personal ends. For-profit, governmental, non-governmental (non-profit), and other (e.g., feminist, grassroots) organizations are analyzed relative to societal inequality.

SYO 6356. Labor, Class, and Social Movement (3). Course covers theoretical and empirical developments in the sociology of labor processes, social classes, and labor movements. Focuses on historical transformations in the relationship between the social organization of work, class formation, and movement mobilization.

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 (9) 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 inquality. May be repeated to a maximum of nine (9) semester hours.

Social Processes

SYP 5105. Theories of Social Psychology (3). Course examines the major theoretical orientations in comtemporary social psychology. Special attention is given to sociologically relevant perspectives such as symbolic interactionism, exchange theory, social learning theory, expectations states/status characteristics theory, emotions work theory, and Goffman's dramatization theory.

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 5446. 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 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 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.

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.

SYA 5907r. Directed Individual Study (3). (S/U grade only.) Prerequisite: Consent of instructor and departmental chairperson. May be repeated to a maximum of nine (9) semester hours.

SYA 5909r. Directed Individual Study (1–3). (S/U grade only.) Prerequisite: Consent of instructor and departmental chairperson. Credit can vary. May be repeated to a maximum of nine (9) semester hours.

SYA 5912r. Supervised Research (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

SYA 5946r. Supervised Teaching (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours.

SYA 5971r. Master's Paper Research (1–6). (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 (6) semester hours.

SYA 6660. Teaching at the College Level in Sociology (3). A graduate seminar focusing on pedagogical issues and practical problems in teaching sociology at the college and university levels.

SYA 6933r. Selected Topics in Sociology (3). May be repeated to a maximum of nine (9) 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 (9) 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 (12) semester hours.

SYA 8960r. Theory Doctoral Preliminary Exam (0).

SYA 8962r. Major Area Doctoral Preliminary Exam (0).

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 (24) semester hours.

SYA 8968r. Preparation for Theory Preliminary Exam (1–6). A mechanism for graduate students to use to prepare for the theory preliminary exam. May be repeated to a maximum of six (6) 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).(S/U grade only.) Indicates student has faculty approval for the Doctoral Review Paper.

SYA 8985r. Dissertation Defense (0).

SPANISH LANGUAGE
see Modern Languages and Linguistics

SPANISH LITERATURE
see Modern Languages and Linguistics

Department of SPECIAL EDUCATION

College of Education

Chair: Mary Frances Hanline; *Professors:* English, Koorland; *Associate Professors:* Burkhead, Ebener, Edwards, Hanline, Lewis, Menchetti, Oseroff, Ponder; *Assistant Professors:* Al Otaiba, Rosenblum; *Visiting Assistant:* O'Farrell*; Professors Emeriti:* G. Jones, Tait; *Courtesy Professor:* L. Jones

The purpose of the graduate program in the Department of Special Education is to prepare professionals to respond to the unique needs of children, youth, and adults with disabilities. The department offers master's degrees in the areas of emotional disturbances/learning disabilities, mental disabilities, visual disabilities, and rehabilitation counseling; a noncategorical education specialist (EdS) degree; and doctoral degrees in special education (PhD or EdD) and rehabilitation counseling (PhdD).

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 Teacher Preparation Programs and State Board of Education Rule 6A-5.066, Approval of Preservice Teacher Preparation Programs.

The following are offered by the Department of Special Education:

Emotional disturbance/learning disabilities

Mental disabilities

Rehabilitation counseling

Special education

Visual disabilities

Certificate in early childhood/special education

Master's Degree Programs in Special Education

Emotional Disturbances/Learning Disabilities

This is a three-year program that starts with the junior year and culminates at the end of the third year with the award of a bachelor's and master's degree. For details, refer to the *General Bulletin*. Individuals wishing to enter the master's degree program directly should see the program coordinator for individual counseling. The course work and the length of the program would depend upon the individual's prior academic preparation.

Mental Disabilities

The mental disabilities program (with a major in mental disabilities) prepares professionals who wish to teach individuals with moderate, severe, or profound mental disabilities. The program of study is individually designed for students based on previous experience and course work. This is not an initial teacher preparation program.

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 meet Florida teacher certification in visual disabilities and plan to work with children must take prerequisites that are essential to the understanding of the field. In addition to course work, the student is required to have practical experiences. The program of study and the length of the program is based upon the applicants prior academic preparation and interests.

Areas of Emphasis

It is possible to emphasize the following with elective course work in special education:

Correctional/special education

Early childhood special education

Severe emotional disturbance

Technology in special education

Transition and community inclusion

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.

Master of Science Rehabilitation Counseling (MS)

The master's degree in rehabilitation counseling is specifically designed to prepare graduate-level students to enter the field of rehabilitation counseling. It is a five semester, sixty (60) semester hour program. The curriculum provides for both the knowledge and skills necessary to be a rehabilitation counselor. One-third of the course work involves development and application of skills in working with clients. Persons with the master of science (MS) degree work in state rehabilitation agencies, nonprofit organizations, and for-profit rehabilitation companies. Many students are hired during the full-time internship of their last semester. Since the program is accredited by the Council on Rehabilitation Education, students are eligible to take the national certification examination during their last semester of course work.

The master's degree in rehabilitation counseling 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 course work may be required. Students who wish to seek licensing should consult the specific state standards and requirements. It is the student's responsibility to assure that their selected course work 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 The Florida State University (send to office of graduate admissions); 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, Rehabilitation Counseling Services, 215 Stone Building, The Florida State University, Tallahassee, FL 32306-4458.*

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. In most cases, applicants for this EdS would already hold a master's degree in an area of special education. The purpose would be to expand their skills and knowledge in their current area of preparation or to extend their skills and knowledge to another area of special education. The EdS is described in more detail in the "College of Education" chapter of this *Graduate Bulletin*.

Doctoral Programs in Special Education

The doctoral program 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. It is possible to earn either the doctor of philosophy (PhD) or the doctor of education (EdD).

Individuals interested in the doctoral degree program should contact the department to request a booklet that explains admission requirements, course of study, financial assistance available, and research interests of the graduate faculty.

Doctor of Philosophy (PhD) in Rehabilitation Counseling

The Doctor of Philosophy Degree (PhD) in Rehabilitation Counseling is designed to prepare individuals to function in a variety of interrelated leadership roles, such as educator, researcher, supervisor, and administrator. It is expected that students graduating from the program will develop competencies in each of the above areas. The application of psychological principles to promote educational attainment, career devlopment, personal adjustment, and human development, in both individual and group/organizational settings, is the primary knowledge base of the degree program. Students entering the program are expected to have demonstrated academic ability and skill in service provision, as well as the potential to develop research and leadership skills. The acquisition of both knowledge and skills by students is achieved through a balance of didactic, experiential course work and supervised practice. Graduates are typically employed in professional positions as university faculty, counselors in university counseling centers and rehabilitation facilities, student services administrarors, adiminstrators in public and private agencies, organizational consultants and trainers, researchers, evaluators and planners of human service programs.

Definition of Prefixes

EED — Education: Emotional Disorders
EEX — Education: Exceptional Child—Core Competencies
EGI — Education: Gifted Child
ELD — Education: Specific Learning Disabilities
EMR — Education: Mental Retardation
EPH — Education: Physical and Multiple Handicaps
EVI — Education: Visual Impairments
MHS — Mental Health Services
RCS — Rehabilitative Counseling Services

Graduate Courses

EED 5223. Advanced Study of Emotional Disturbance (3). Theoretical and practical issues and instructional strategies for the emotionally disturbed.

EED 5320. Precision Teaching Methods for Emotional Disturbances (3). Techniques for using direct, daily, and continuous measurement in the assessment and instruction of youth with academic and emotional/behavioral problems.

EED 5941. Practicum in Emotional Disturbance/Learning Disability (3). 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 5237. Methods for Teaching Students with Low Incidence Disabilities. This course offers an overview of curriculum and instructional needs of students with low incidence disabilities.

EEX 5245. Introduction to Special Education Technology (3). Prerequisite: EEX 2010. Introduction to ways technology (computers) is used with special education students.

EEX 5247. 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 5258. Advanced Reading Instruction for Students with Disabilities. This course examines methods for assessing and teaching reading skills to individuals with disabilities.

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 (6) semester hours.

EEX 5286. Preparing Individuals for Transition (3). Planning and implementing appropriate transitional services for youths with disabilities in the public schools.

EEX 5455. Assessment and Methods in Early Childhood Special Education (3). Prerequisite: EEX 5017. Focuses on formal and informal evaluation techniques and individualized instruction for young children with disabilities.

EEX 5456. Program Development for Young Children with Disabilities (3). Focuses on issues related to providing comprehensive services to young children with disabilities.

EEX 5521. Leadership Skills in Exceptional Education (3). Designed to study problems of public attitudes, regulations, finance, specialized personnel, facilities, and identification of pupils and their special needs as they pertain to education services for exceptional children and youth.

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 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 (12) semester hours. Offered fall and spring semesters only.

EEX 5844r. Leadership Practicum in Special Education (3). A practicum designed to provide the graduate student with experience in a leadership role in one or more settings involved in the administration, supervision, or coordination of special education programs. May be repeated to a maximum of nine (9) semester hours.

EEX 5866r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

EEX 5906r. Directed Individual Study (1–3). May be repeated to a maximum of twelve (12) semester hours. Not offered summer term.

EEX 5911r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (9) 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 (6) 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 (9) semester hours.

EEX 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours of credit is required.

EEX 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) A minimum of six (6) 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 (6) semester hours.

EEX 6306. Design and Preparation of Research in Special Education (3). Development of research topics and methodology.

EEX 6341. Critical Review of Special Education Research (3). Analysis and synthesis of research areas relating to exceptional individuals.

EEX 6342. Seminar: Readings in Education, Training, and Treatment of Exceptional Individuals (3). Comprehensive study of special education literature in a variety of areas.

EEX 6426. Research and Practices in Special Education Personnel Development (3). Study of professional preparation of individuals serving exceptional individuals.

EEX 6931r. Seminar in Early Childhood/Special Education (3). May be repeated to a maximum of twelve (12) 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 (9) semester hours.

EEX 6980r. Dissertation (1–12). (S/U grade only.)

EEX 8964r. Preliminary Doctoral Examination (0).

EEX 8966r. Master's Comprehensive Examination (0).

EEX 8968r. Specialist in Education Comprehensive Examination (0).

EEX 8976r. Master's Thesis Defense (0).

EEX 8978r. Specialist in Education Thesis Defense (0).

EEX 8985r. Dissertation Defense (0).

EGI 5936. Seminar for Teachers of the Gifted (3). Prerequisite: Permission of instructor. A critical review of research and practice in the special education of the gifted and talented and their teachers.

EGI 5940. Mentorship Practicum for the Gifted (5). Prerequisite: EGI 4416. Planning, establishing, and implementing a computerized community resource network for secondary and postsecondary gifted student mentorship programs.

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 (2). This course will provide participants with field experience in the development, assesment, and instruction of individuals with severe and profound disabilities. May be repeated to a maximum of six (6) semester hours.

EMR 5930. Seminar in Mental Retardation Topics (3). Advanced study of mental retardation in specific topical areas.

EPH 5312. Educational Management of the Physically Handicapped (3). Prerequisite: EMR 4011. Educational methods and materials for children and youth with cerebral palsy and other physical and motor disabilities. Clinical (field) experience is required.

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 5112. Advanced Assessment of the Visually Handicapped (3). Teaches students to deal effectively with the assessment of the visually impaired child and adult.

EVI 5131. Teaching Deaf-Blind/Multisensory Impaired Individuals (3). Skills and knowledge to teach deaf-blind/multisensory impaired individuals.

EVI 5221. Teaching Orientation and Mobility for the Visually Impaired (3). Corequisite: EVI 4220. Course focuses on developing an awareness and understanding of the complexities of movement without sight and techniques that can increase orientation to and independent movement within the environment for the population of individuals with visual impairment. O/M majors only.

EVI 5222. Advanced Orientation and Mobility for the Visually Impaired (3). Prerequisite: EVI 5221. Advanced practicum for majors in mobility education. Further development of teaching and observational skills and direct experience teaching individuals with visual impairments. O/M majors only.

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 needs of individuals with residual vision, in order to work with them more effectively.

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 5931r. Seminar in Visual Disabilities (3). Current topics in the field of visual disabilities. May be repeated to a maximum of six (6) 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.

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 (16) semester hours.

MHS 5860r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) semester hours may apply to the master's degree.

MHS 5905r. Directed Individual Study (1–3). May be repeated to a maximum of twelve (12) semester hours.

MHS 5915. Supervised Research (1–4). May be repeated to a maximum of five (5) semester hours. A maximum of three (3) 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 (16) semester hours.

MHS 8980r. Dissertation (1–12). (S/U grade only.)

RCS 5080. Medical Aspects of Disability (3). Introduction to structure of medicine in the U.S., survey of medical specialities and terminology; survey of body systems, common malfunctions, therapeutic services, restorative techniques, and disability evaluation.

RCS 5245. Psychosocial and Multicultural Aspects of Disability (3). The major theoretical perspectives and concepts of adjustment and adaptation to a disability and chronic illness are examined. Social, cultural and psychological factors of disability are explored from a life-span perspective.

RCS 5250. Assessment in Counseling and Rehabilitation (3). Understanding of assessment approaches used with counseling and rehabilitation clients.

RCS 5320. Placement Methods and Techniques (3). An overview of major job placement approaches including selective, consultive, and job seeking skills models. While applications to the employment of disabled persons will be 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 5620. Administration and Supervision in Rehabilitation (3). 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 (12) semester hours.

RCS 5930r. Special Topics in Rehabilitation (2). Issues in rehabilitation arising from new legislative developments and research in the field; e.g., independent living rehabilitation. May be repeated to a maximum of six (6) semester hours.

RCS 6249. Advanced Psychological and Social Aspects of Disability (3). Prerequisite: RCS 5245. Seminar examines the major psychological and social theories related to adjustment and adaptation to a disability or chronic illness with emphasis placed on research, applicability, and efficacy of these theories.

RCS 6259. Advanced Assessment in Rehabilitation Counseling (3). Prerequisite: RCS 5250. Theories and research related to assessment and evaluation procedures used in various rehabilitation settings. Emphasis will be placed on psychological, medical, vocational, and ecological assessment procedures.

RCS 6400. Advanced Theories and Principles of Rehabilitation (3). Prerequisite: MHS 5400. 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 6700. Professional Issues in Rehabilitation Counseling (3). Prerequisite: RCS 5410. 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 (6) semester hours.

SPEECH COMMUNICATION
see Communication

SPEECH PATHOLOGY/ AUDIOLOGY
see Communication Disorders

Department of SPORT MANAGEMENT, RECREATION MANAGEMENT AND PHYSICAL EDUCATION

College of Education

Chair: Charles Imwold; *Professors:* Imwold, Johnson, Mundy, Ragheb; *Associate Professors:* Beeler, Clement, Dunn, Fletcher, Lynn, Quarterman, Ratliffe; *Assistant Professors:* Jackson, Kent, Mondello; *Assistant in Leisure and Recreation Services:* Suren; *Assistants in Physical Education:* Burdette, Fedena, Martin, Nobles, Reynaud, Walsdorf; *Visiting Assistants:* Bond, Richards; *Professors Emeriti:* Burton, Cannon, Everett, Fox, Jones, Tait, Veller, Wells

The mission of the Department of Sport Management, Recreation Management and Physical Education is to provide high quality, professional education aimed at producing qualified professionals for the sport industry, recreation and leisure service organizations, as well a 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, in recreation, park, and leisure service organizations, and in physical education programs; and (c) provide high quality leadership and service that advance professional organizations in the three programs, as well as benefit The Florida State University.

Programs of study in the Department of Sport Management, Recreation Management and Physical Education lead to the master of science (MS), the doctor of philosophy (PhD), and doctor of education (EdD) degrees in physical education, with majors in sport administration and physical education, and a master of science degree in Recreation and Leisure Services Administration. A specialist in education (EdS) degree also is offered with a major in physical education.

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 Teacher Preparation Programs and State Board of Education Rule 6A-5.066, Approval of Preservice Teacher Preparation Programs.

The following degrees are offered by the Department of Sport Management, Recreation Management and Physical Education:

Physical education (MS, PhD, EdD, EdS)

Recreation and leisure services administration (MS)

PHYSICAL EDUCATION

Master's Programs

The master of science (MS) degree in physical education comprises two majors: sport administration and physical education with a concentration in teacher education. Both thesis and nonthesis options are offered in both majors. Core courses are required in all tracks. Six (6) semester hours of 4000 level work may be part of the

program with permission of the supervisory committee. Master's degree applicants for the physical education major must have completed an undergraduate major in physical education from an accredited institution with teacher certification in physical education.

Specialist Program

The specialist in education degree in physical education is available with a major in physical education with a concentration in teacher education. Students in this major must meet all requirements for the doctoral program in physical education. Course work is tailored to the student's individual needs, goals, and interests.

Doctoral Programs

The doctor of philosophy and doctor of education degrees in physical education have majors in sport administration and physical education with a concentration in teacher education. The prospective student in either the sport administration or the teacher education program should have completed a master's degree in physical education, sport administration, or a related area and should have a minimum of two years experience in full-time, K–12 physical education teaching, administration, or other appropriate professional experience. The prospective student in physical education must have teacher certification in physical education. In some cases, this experience may be gained while the graduate student is pursuing the degree. Students are admitted by approval of faculty in their major after a review of admissions materials, including transcripts and recommendations.

Admissions

All applicants for advanced degrees in the department must take the Graduate Record Examinations (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.

Sport Administration and Teacher Education in Physical Education. Master's students must have a bachelor's degree from an accredited institution and present a GRE score. They may be admitted with a 3.0 upper-division grade point average (GPA) or with a 1000 on the GRE (with neither verbal nor quantitative below 400). Doctoral students must have a master's degree from an accredited institution and present a GRE score. They may be admitted with 1000 on the GRE (with neither verbal nor quantitative below 450). Applicants with a minimum of 450 on each part but less than 1000 may be admitted if supported by additional evidence of scholarly ability. These scores represent minimum requirements and do **not** guarantee admission. For more details on all programs and admission standards, please refer to the departmental website at *http://www.fsu.edu/~smrmpe*.

Definition of Prefixes

PEO — Physical Education Activities (Professional): Land—Object Centered
PEP — Physical Education Activities (Professional): Land—Performance Centered
PET — Physical Education Theory

Graduate Courses

PEO 5042. Educational Games I (3). Corequisites: PET 4710, 4710L. The purpose of the course is to study the appropiate 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 5145. Issues in Physical Education (3). A discussion of current issues in physical education.

PET 5215. 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 5252. Gender Issues in Sport and Physical Activity (3). Poststructural and feminist theory are used to critically examine the commonplace notions surrounding gender and sport.

PET 5257. Lesbian and Gay Sport Studies (3). This course provides an overview of lesbian and gay people in sport with a historical and contemporary socio-cultural perspective involving both the lesbian and gay sport industry and the mainstream sport industry.

PET 5258. Race and Ethnicity in Sport (3). This course examines the role and impact that ethnicity and racism have had in the world of sport; it also seeks to develop an understanding and appreciation for diversity in sport. Students and future teachers are introduced to the realities of bias and prejudice that exist and perpetuate within sport. The varied experiences of numerous ethnic minority groups in the United States are examined.

PET 5295. 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.

PET 5406. Facility Management in Sport (3). Study of sport/multi-purpose public assembly facility management. Includes design, planning processes, funding, construction, and maintenance.

PET 5415. Administration of Physical Education (3). Study of administrative problems particular to college programs of physical education.

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 5463. Event and Special Projects Promotion in Sport (3). Topics and issues involved in the promotion and marketing of sporting events. Examination of the evolution of large scale corporate marketing strategies.

PET 5464. Strategic Management for Sport Organizations (3). This course examines the fundamentals of strategic management theory important for effective leadership in the sport industry.

PET 5465. 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.

PET 5467. NCAA Compliance and Institutional Control (3). Prerequisite: PET 5476. Course prepares students for current NCAA rules, policies, enforcement procedures and compliance strategies.

PET 5470. 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.

PET 5472. 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.

PET 5476. 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.

PET 5478. 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 managemnt.

PET 5535. Research Methods (3). Methods and techniques used in research in physical education including library materials and writing techniques.

PET 5615. Evaluation and Assessment in Adapted Physical Education (3). Topics in diagnosis, screening, and prescription of remedial activities for the handicapped. Offered alternate years.

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 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 adoloscents.

PET 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

PET 5912r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of four (4) semester hours. A maximum of three (3) semester hours may apply to the master's degree.

PET 5940r. Field Laboratory Internship (1–8). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

PET 5942r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of four (4) semester hours. A maximum of three (3) hours may apply to the master's degree.

PET 5947r. Practicum in Sport Administration (3). 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 (9) semester hours when topics change.

PET 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

PET 5972r. Specialist in Education Thesis (1–6). (S/U grade only.)

PET 6419. Supervision in Physical Education (3). Theory and practice of the supervisory process in the physical education setting. Offered alternate years.

PET 6466. 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.

PET 6468. Organizational Theory in Sport (3). Prerequisite: EDF 5400; PET 5415, 5535. 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.

PET 6469. Leadership & Organizational Behavior in Sport (3). Prerequisites: EDF 5400; PET 5415, 5535. 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.

PET 6494. Advanced Law in Sport and Physical Activity (3). Prerequisite: Permission of instructor. 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 statues, sexual harassment and risk management also will be addressed. Students will select two topics for in-depth analysis.

PET 6497. Seminar in Administration of Physical Education and Athletics (3). Prerequisite: PET 5535. 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.

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 (12) semester hours.

PET 6938r. Graduate Research Seminar (0). (S/U grade only.) Presentation and discussion of current research topics in physical education teacher education and sport administration. May be taken up to a maximum of four (4) times.

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 (9) semester hours.

PET 6969. Doctoral Qualifying Exam (0). (S/U 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).

PET 8966r. Master's Comprehensive Examination (0).

PET 8968r. Specialist in Education Comprehensive Examination (0).

PET 8976r. Master's Thesis Defense (0).

PET 8977r. Specialist in Education Thesis Defense (0).

PET 8982r. Dissertation Defense (0).

RECREATION AND LEISURE SERVICES ADMINISTRATION

Coordinator: Cheryl Beeler

The graduate program at the master's level is designed to prepare students for top-ranking administrative and management positions in recreation/leisure/park delivery systems. The program attracts the type of student who aspires to become a problem solver, trendsetter, decision maker, and leader within the recreation/leisure/tourism field.

With a master's degree from the recreation and leisure services administration program, students may qualify for such positions as: community college or university instructor of recreation/leisure curricula, and CEO/ superintendent/manager/supervisor of programs or activities.

Examples of places of employment may include but not be limited to: colleges/universities; morale and welfare divisions of military bases; correctional centers; state departments of natural resources; divisions of tourism; destination resorts or hotels; convention and visitors bureaus; city, county, or regional park and recreation departments; youth-serving organizations; corporate recreation divisions; health/fitness centers or spas; and retirement community or senior centers.

The recreation and leisure services administration program boasts one of the finest faculty across the nation. The faculty members take pride in their sincere interest in the lives of individual students. The faculty is a cohesive group that enjoys scholarship, teaching, learning, and sharing with students. The national reputation of this faculty is sustained through active involvement in local, state, national, and international teaching, research, and service.

Admission Requirements

Admission to graduate studies requires acceptance to both The Florida State University and to the program of recreation and leisure services administration. Students are admitted in both the fall and spring semesters. Admission to the graduate program is based upon the following: 1) baccalaureate degree from an accredited college or university; 2) good standing in the institution of higher learning last attended; 3) a graduate application with professional goals statement for recreation and leisure services; 4) three recommendation forms; 5) submission of current GRE scores; and 6) minimum grade point average (GPA) of 3.0 (on a 4.0 scale) in the last two years of study for baccalaureate degree, **or a 3.5 (on a 4.0 scale) in a master's degree program,** or a minimum score of 1000 on the combined verbal and quantitative portions of the Graduate Record Examinations (GRE). Final selection decisions are determined by examining a composite of all the above information.

All students must take the GRE and submit their scores before enrolling in graduate course work, even if they have been accepted to the program based on their GPA. For application materials, contact: *Graduate Coordinator, Recreation and Leisure Services Administration, 200 Tully Gym, The Florida State University, Tallahassee, FL, 32306-4280* or call *(850) 644-4813.*

Degree Requirements

The minimum number of semester hours required to earn a nonthesis master's degree is thirty-five (35). Thirty-two (32) hours are required for students writing a thesis. Graduate students entering the program who do not have a degree in the recreation/leisure/park field from a National Recreation and Park Association accredited curriculum, or who have not completed an internship, may be required to satisfy deficiencies by successfully completing undergraduate courses and/or an internship.

The thirty-five (35) semester hours required by all students include LEI 5171, 5185, 5889, 5815, 5555, 5530, 5576, 8966 or 8976; EDF 5400; and twelve (12) elective hours in an area of concentration. Students may elect to earn special certificates in their master's program by taking a carefully planned series of courses in one of the following areas: aging studies, college teaching, and/or public administration. Students desiring the college teaching certificate may use their elective hours to take course work such as EDH 5051, 5081, 5305, 5405, and EDA 5506. Those interested in the public administration certificate may use elective hours to take PAD 5035, 5050, 5106, 5227, and 5417. Students wanting the aging studies certificate may use elective hours to take REL 3191; ISS 5930 and, 5945; and URP 5520.

The faculty is also willing to work with students to design individualized programs of study which suit the needs and interests of the students. Examples of other specialty areas are: leisure education and counseling, leisure behavior research, computer applications to leisure systems and fitness/wellness.

Definition of Prefixes

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 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 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 (12) semester hours.

LEI 5915r. Supervised Research (1–4). (S/U grade only.) May be repeated to a maximum of four (4) semester hours. A maximum of three (3) 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 (12) hours.

LEI 5941. Practicum in Leisure Services (9). Full-time experience in a leisure agency under the supervision of a professional practitioner.

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 (6) semester hours.

LEI 5945r. Supervised Teaching (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

LEI 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

LEI 8966r. Master's Comprehensive Examination (0).

LEI 8976r. Master's Thesis Defense (0).

SPORTS PSYCHOLOGY
see Educational Psychology and Learning Systems

Department of STATISTICS

College of Arts and Sciences

Chair: Myles Hollander; *Director, Statistical Consulting Center:* Zahn; *Professors:* Hollander, Huffer, Leysieffer, Lin, McGee, McKeague, Sethuraman, Zahn; *Associate Professors:* Niu, Song; *Assistant Professors:* Li, Srivastava; *Visiting Assistant Professors:* Bunea, Chattopadhyay, Chicken; *Assistant in Statistics:* Ramsier; *Professors Emeriti:* Basu, Bradley, Marsaglia, Proschan

The Department of Statistics offers programs leading to the master of science (MS) and the doctor of philosophy (PhD) degrees. Emphases in probability theory and stochastic processes, mathematical statistics, and applied statistics are possible.

The MS program prepares the student for future graduate study toward the doctorate or for professional careers in industry and government. There are two options in the MS program. The applied statistics option is a four-semester program that emphasizes the statistical and consulting skills necessary for a professional statistician immediately employable in business, industry, and government. While some statistical theory is taught, the emphasis is on the proper applications of statistical techniques. Within this applied statistics option, the student may pursue a course of study that emphasizes computational biology. The mathematical statistics option is a four-semester program together with a comprehensive examination, which emphasizes both applied and theoretical statistics. With the deeper training in the theory of statistics this program provides, students are prepared for immediate employment in industry. It also prepares them for continuation into the doctoral program in the department. MS students planning to continue to the doctoral program should select this option.

The PhD program prepares the student for research, university teaching, and research participation in government and industry. Doctoral programs are planned in order to permit study up to the research level in two specializations, only one of which need be in the Department of Statistics; examples are probability and mathematical statistics, probability and functional analysis, mathematical statistics and economic theory, and mathematical statistics and population genetics. The dissertation must constitute scholarly research in the advancement of knowledge in the theory or utilization of probability and statistics.

The Department of Statistics offers a wide selection of graduate and undergraduate courses in statistical methods for nonmajors with minimal background in mathematics. STA 5126 is a prerequisite for the remaining courses, which are STA 5106, 5206, 5207, 5225, 5507, 5666, 5707, and 5856. Course outlines for recent offerings of these courses are available in the departmental office.

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 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, has a local area network of workstations and PC's running Solaris, IRIX, Linux and Windows operating systems, as well as networked printers. Linked to the campus-wide network, they may be used to access the university operated supercomputers, other university systems, and Internet and Internet2 networks.

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 Institute of Health, the National Imagery and Mapping Agency, and the United States Army Research Office. The department was one of four units of the University that participated in a National Science Foundation Science Development grant designed to develop centers of excellence in the sciences. The program of the department is currently designated by the State of Florida as one of its programs of distinction.

The Department of Statistics maintains a departmental library and reading room, the Wilcoxon Memorial Room, and provides facilities for computation in connection with course work and research. The **Laboratory for Computational Vision**, funded by federal grants, houses high performance Silicon Graphics computers for large computations and visualizations, and sophisticated imaging facilities. Ongoing research includes development of probablity models and computational algorithms for automated recognition of objects from their camera images. Participating students gain expertise in computational statistics, imaging concepts, and high performance computing. The lab is an important part of the department's thrusts in multi-disciplinary research.

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. Normally, students who elect the mathematical statistics MS option should have the essentials of an undergraduate mathematics major. Students who have not had mathematics MAA 4226–4227 or the equivalent must expect to progress at a somewhat slower rate. Students who elect the applied statistics option should have had the equivalent of three semesters of calculus. A score of at least 1000 on the aptitude test of 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 of the master of science degree are possible:

1. A program emphasizing applied statistics which can normally be completed in four semesters without a comprehensive examination;

or

2. A program emphasizing mathematical statistics which can normally be completed in four semesters with a comprehensive examination.

Master of science degree candidates intending to continue to the doctoral program in this department must select the mathematical statistics option. A detailed description of the master of science program in statistics can be obtained from the department. Full course programs are prepared in consultation with the student's master's supervisory committee.

The Doctor of Philosophy Degree

Doctoral students concentrate course work in two areas of specialization, to the extent that the course work brings them to the frontiers of knowledge in the areas chosen. Unusual flexibility exists within this program, in that only one of the areas needs to be chosen from within the department.

The department offers an Interdisciplinary Option (IO) within the doctoral program. This program is consistent with the departments emphasis on interdisciplinary research. IO students select an area of interest in a field related to statistics. To begin taking graduate level courses in an area of interest, IO students are recommended to have prior course work or experience in their selected area. IO students take at least three graduate level courses in their area of interest as well as the core courses required for the standard PhD option.

The department also offers a standard PhD program that features concentration in four areas: 1) probability theory and stochastic processes; 2) statistical inference; 3) applied statistics, including biostatistics; and 4) reliability theory and survival analysis. A student may choose both concentrations from the above areas. A student preparing for an academic career in a department of mathematics may wish to combine study in probability and stochastic processes with functional analysis in the Department of Mathematics. A student interested in applying statistics to environmental problems might combine study in applied statistics with ecological studies in the Department of Biological Science. Many such combinations are possible and have been completed by graduates of our program.

The course program must include a minimum of twelve (12) semester hours at the 6000 level, with the selection of courses subject to the approval of the student's supervisory committee. There is no formal language requirement, although a student's advisory committee may suggest reading knowledge of a foreign language if that is relevant to the research work being planned or the student's career plans.

Course programs and exact degree requirements are determined individually for students through consultation with their supervisory committee. Many students enter the doctoral program through the master's program. Students entering the program with equivalent work at other institutions will not be required to repeat it here. In preparing a course program, however, students should keep in mind that they are required to pass the PhD qualifying examination as one step towards the degree.

Definition of Prefix

STA — Statistics

Graduate Courses

STA 5106. Computational Methods in Statistics I (3). Prerequisites: At least one previous course in statistics above STA 1013; some previous programming experince; or permission of the instructor. 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 permission of the instructor. 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. (4). Prerequisite: MAC 1105. Graduate credit for non-statistics majors only. Data collection, sample variation, basic probability, confidence intervals, hypothesis testing, analysis of variance, contingency tables, correlation, regression, nonparametric statistics.

STA 5130. 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 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 5169. Advanced Applied Statistics (3). Prerequisites: STA 5167, 5327. Contemporary methods in applied statistics; resampling methods including bootstrapping; nonparametric regression.

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 consent of instructor. Simple stratified, systematic, and cluster random sampling. Ratio and regression estimation. Multistage sampling.

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 consent of instructor. Applications of nonparametric tests, estimates, confidence intervals, multiple comparison procedures, multivariate nonparametric methods, and nonparametric methods for censored data.

STA 5619. Operations Research: Linear and Dynamic Programming (3). Prerequisite: MAC 2312. Techniques of optimization in deterministic and stochastic processes, time dependent or time independent, the simplex method, duality, application to game theory, Bellmans recursion equations, applications to problems in science, economics, industry, and engineering.

STA 5666. Statistics for Quality and Productivity (3). Prerequisites: STA 5167 or consent of the instructor, 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 (12) 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 (5) semester hours. A maximum of three (3) 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 (12) semester hours.

STA 5934r. Selected Topics in Statistics, Probability, or Operations Research (2–3). May be repeated to a maximum of twelve (12) semester hours.

STA 5936. Graduate Orientation Seminar (1). (S/U grade only.)

STA 5939. Introduction to Statistical Consulting (3). (S/U grade only.) Prerequisites: 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 (12) semester hours.

STA 5941r. Supervised Teaching (1–5). (S/U grade only.) May be repeated to a maximum of five (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

STA 5971r. Thesis (3–6). (S/U grade only.) Six (6) semester hours credit required.

STA 6246r. Advanced Topics in Applied Statistics (2–3). Prerequisite: STA 5167. May be repeated to a maximum of twelve (12) semester hours.

STA 6346. Advanced Statistical Inference (3). Prerequisite: STA 5327.

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 (12) semester hours.

STA 6555. Nonparametric Curve Estimation (3). Prerequisite: STA 5327 or consent of instructor. 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, includinggeostatistical data, lattice data and point patterns. Theory and applications of basic principles and techniques.

STA 6858. Advanced Time Series Analysis (3). Prerequisite: STA 5856 or consent of instructor. Stationary and nonstationary processes, univariate ARIMA and transfer function models, multivariate time series models, state-space models, nonlinear time series models, estimation procedures, model building strategies and forecasting applications to real world problems.

STA 6906r. Directed Individual Study (1–12). (S/U grade only.) May be repeated.

STA 6980r. Dissertation (1–12). (S/U grade only.)

STA 8961. Statistics Proficiency Examination (0).

STA 8964. Preliminary Doctoral Examination (0).

STA 8966. Master's Comprehensive Examination (0).

STA 8976. Master's Thesis Defense (0).

STA 8985. Defense of Dissertation (0).

SURVEYING AND RELATED AREAS
see Civil and Environmental Engineering

TAX ACCOUNTING
see Accounting

TEACHING ENGLISH AS A SECOND LANGUAGE
see Middle and Secondary Education

Department of TEXTILES AND CONSUMER SCIENCES

College of Human Sciences

Chair: Rinn M. Cloud; *Professors:* Cloud, Davis, Goldsmith, Moore; *Associate Professors:* Fiorito, Grise, Heitmeyer; *Assistant Professors:* Black, Kind; *Visiting Assistant Professor:* Kim; *Associate in Merchandising:* McLaughlin; *Assitant in Apparel Design:* Welch; *Visiting Instructor:* Hattaway; *Professors Emeriti:* Adam, Avery, Edgeworth, Kittles, Kuehne, Warden; *Eminent Scholar*: Susan Watkins

The Department of Textiles and Consumer Sciences offers graduate programs leading to the master of science (MS) degree with thesis and coursework options in the following areas of emphasis: textiles, retail merchandising, apparel product development, creative design, global product development, and residential environments. The department also participates in the doctor of philosophy (PhD) degree in human sciences with specializations in merchandising and apparel/textile product development.

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 and research interests. Students who do not have previous course work 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.

Facilities for graduate study include: chemical and physical textile laboratories with a conditioning room and sensory evaluation laboratory, the Burdines Merchandising Technology Laboratory, the Lectra Computer-aided Design Laboratory, apparel assembly and design laboratory, general computer laboratories, an outstanding research and teaching collection of historic clothing dating from the 1800s, textiles dating from the 1400s, and a display gallery. The textiles collection includes the unique Carter Collection of pre-Columbian Peruvian Textiles.

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 files should be submitted to the department by January 1st to ensure consideration for the Fall; forms are available upon request. Information concerning other types of financial aid may be obtained by contacting: *Office of Financial Aid, A4474 University Center, The Florida State University, Tallahassee, FL 32306-1046.*

Master's of Science Programs

The goal of the graduate program is to provide students with professional preparation for stimulating careers in business, education, and government as well as in the textile, apparel, retail and housing industries. Two types of master's programs are available: thesis and non-thesis (coursework only). The thesis master's degree provides a strong foundation for doctoral study.

A candidate for the master's of science (MS) thesis degree may select an emphasis in: textiles, retail merchandising, apparel product development, or residential environments.

Thesis Programs

Programs of study for the thesis master's degree require a minimum of thirty-three (33) semester hours, including six (6) semester hours of thesis, twelve (12) semester hours of foundational course work in research, theory and statistics, nine (9) semester hours in the area of emphasis, and six (6) semester hours of supporting course work from an appropriate field. Students without an undergraduate degree in the field will be required to take additional courses.

Textiles

Graduate students in textiles focus their studies on the physical/mechanical or physiochemical properties of textiles and the effect of these properties on product development and end-use performance. Research focuses on comfort and barrier performance of protective clothing fabrics, and light and laundry fastness of environmentally-improved textiles.

Retail Merchandising

The retail merchandising emphasis allows students to investigate business and consumer factors influencing the development, retail distribution, and use of consumer goods. Research may focus on the planning and analysis of financial performance of small business, developing technologies in retailing, patronage and shopping preference, or factors influencing apparel consumption.

Apparel Product Development

Graduate students in apparel product development apply the theories and principles of design process to develop solutions for functional clothing issues. Research addresses needs assessment, prototype development, and evaluation of various types of funtional apparel.

Residential Environments

The emphasis in residential environments addresses the effect of the near environment on human behavior and the application of business and human behavior principles to the management of residential housing. Research in this area addresses residential design and management issues for residential property managers and other housing professionals.

Coursework Programs

Coursework (non-thesis) programs require a minimum of thirty-nine (39) graduate semester hours. Students without appropriate background coursework will be required to complete additional undergraduate or graduate courses. Detailed course requirements for each of the following areas are available from the department.

Professional Merchandising with Practicum

The professional merchandising emphasis includes a practicum with a retail firm. The program of study provides advanced coursework in retail merchandising, supply chain management, consumer patronage and purchase behavior, and market analysis, as well as foundational courses in research, theory and statistics. Students without a previous degree in retail merchandising will be required to complete additional undergraduate or graduate courses.

Creative Design

In addition to courses focused on creativity, design process, product development theory, and problem solving, the emphasis in creative design includes advanced development of creative apparel designs for submission to juried competition and development of a themed collection for exhibition. Outstanding computer-aided design (CAD) facilities enable students to employ leading-edge technology in developing and presenting their designs. Students without previous coursework or experience in apparel design will be required to complete additional undergraduate or graduate courses.

Global Product Development

The global product development emphasis prepares professionals to address consumer and technical issues involved in developing fashion products in and for the global marketplace. The program of study focuses on theoretical and technical aspects of color and color communication, product testing and evaluation for quality management, global consumer and market assessment, and international trade issues. Optional courses taught at international locations may also be included in the student's program. Students without appropriate background coursework will be required to complete additional undergraduate or graduate courses.

Doctor of Philosophy with Specialization in Textiles and Consumer Sciences

The doctor of philosophy (PhD) is a research degree granted to students who have mastered a specific field of knowledge, demonstrated capacity to do original and scholarly investigation, and shown ability to think critically. The program is designed to prepare students for careers in university teaching and research as well as for research positions in business and industry. This professional degree focuses on the application of theory and scientific knowledge to the design, development, production, merchandising, and consumption of textile, apparel, and other consumer products. Areas of emphasis include: merchandising and apparel/textile product development.

The program of studies is planned in consultation with the major professor and supervisory committee, following departmental guidelines, to provide depth in the selected area of emphasis as well as competency in statistics and research methodology. College and department core courses, support courses from an appropriate field and a supervised teaching experience are also included in the program of studies. The diagnostic examination, taken by all doctoral students in the first semester of study, is used to help plan the program of studies.

Doctoral students must successfully complete all course work listed in the program of studies with an overall grade point average (GPA) of 3.0 or better, pass the written and oral preliminary examination formally admitting the student to candidacy, submit and obtain approval for a prospectus; and write and successfully defend a doctoral dissertation (at least twenty-four [24] semester hours).

Definition of Prefix

COA — Consumer Economics
CTE — Clothing, Textiles and Merchandising
HEE — Home Economics Education
HHD — Housing and Home Design
HOE — Home Economics: General

Advanced Undergraduate Courses

COA 4131. Family Financial Analysis (3). Principles and problems of money management, credit, insurance, housing, transportation, taxes, and investments.

CTE 4421r. Advanced Topics in Textiles (3–9). Prerequisites: CTE 1401, 1401L.Topics of current technology and research in textile science. Specific topics will vary. May be repeated to a maximum of nine (9) semester hours when topics vary. (Spring semester only.)

CTE 4460. Textiles in the Global Economy (3). Prerequisites: CTE 1401; ECO 2013. Economic factors of production, distribution, and consumption of textile products. The impact of legislation, regulations, and international trade on the global textile and apparel market. (Spring and Summer only.)

CTE 4752. Design Through Draping (3). Prerequisite: CTE 3341, 3742. The fundamentals of draping on the human form as a method of apparel design. (Fall semester only.)

Graduate Courses

COA 5150. Family Economics (3). Prerequisite: Background in consumer economics or family. Analysis of the interaction of family and economic systems.

COA 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of six (6) semester hours.

COA 5945r. Consumer Education Practicum (3–6). May be repeated to a maximum of six (6) semester hours.

COA 5912r. Supervised Research (1–3). (S/U grade only.) May be repeated to a maximum of three (3) semester hours.

COA 5942r. Supervised Teaching (1–3). (S/U grade only.) May be repeated to a maximum of three (3) semester hours.

COA 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required for the master's degree.

COA 6936r. Special Topics: Consumer Economics or Resource Management (3–9). Topics vary. Each topic may be taken only once. May be repeated to a maximum of nine (9) semester hours.

COA 6980r. Dissertation (1–24). (S/U grade only.)

COA 8964r. Preliminary Doctoral Examination (0).

COA 8966r. Master's Comprehensive Examination (0).

COA 8976r. Master's Thesis Defense (0).

COA 8985r. Dissertation Defense Examination (0).

CTE 5426. Recent Developments in Textiles (3). Prerequisite: previous textile coursework. In-depth analysis of current, specialized topics in textiles with focus on economics, environmental, and technological factors related to textiles and apparel production.

CTE 5535r. Advanced History of Costume (3). Prerequisite: History of costume, or textiles, or permission of the instructor. In-depth study of selected periods of costume history relating clothing to the artistic, social, religious, and economic conditions of the time; the use of primary and secondary resources, outstanding collections, and published research; analyze and solve specific conservation problems. May be repeated to a maximum of six (6) semester hours.

CTE 5536r. Selected Studies in Historic Textiles (3). Prerequisite: History of costume, or textiles, or permission of instructor. Western and non-Western textile developments and their relationships to technological, economic, political, social, religious, aesthetic, and cultural influences. Introduction to historic textiles conservation and research. May be repeated to a maximum of six (6) semester hours.

CTE 5605. Theoretical and Cultural Aspects of Clothing (3). Prerequisite: CTE 3602 or permission of the instructor. Theoretical and socio-cultural approaches to clothing and socio-economic and psychological forces as determinants of fashion in modern times.

CTE 5729. Experimental Clothing Design (3). Prerequisite: CTE 4752, 4773 or permission of the instructor. A theoretical and practical approach to designing fashionable and functional clothing for special needs related to age, physical and mental disabilities, occupation, recreation, and thermal comfort.

CTE 5754r. Advanced Draping (3). Prerequisite: CTE 4752 or permission of instructor. Advanced interpretive skills of design through draping. Students using draping techniques to resolve complex problems in design development. May be repeated to a maximum of six (6) semester hours with permission of instructor.

CTE 5760r. Creative Design: Exhibition and Competition (3). Prerequisite: background in apparel design. Development of advanced interpretive skills of design through two and three-dimensional design forms. Students will create original designs for juried competitions and/or gallery exhibitions. May be repeated to a maximum of six (6) semester hours.

CTE 5805. Current Trends in Fashion Merchandising (3). Prerequisites: Economics, marketing, psychology. Provides an opportunity to research, discuss, and analyze concepts and current trends in merchandising.

CTE 5815r. Retail Technologies (3). Indepth 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. Family-Owned Businesses: Issues and Trends (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 course work. Course focuses on the theories utilized in merchandising, including evaluating the use of these theories in current research.

CTE 5884. Advanced Fashion Merchandising Practicum (4). (S/U grade only). Prerequisites: Graduate standing in merchandising; completion of fifteen (15) hours of graduate course work including CTE 5816, 5828 or equivalent. Professional development through practical experience in retail merchandising.

CTE 5906r. Directed Individual Study (1–3). May be repeated to a maximum of six (6) 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 (3) 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 (12) semester hours.

CTE 5942r. Supervised Teaching (1–3). (S/U grade only.) May be repeated to a maximum of three (3) 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 (6).

CTE 6900r. Readings in Clothing, Textiles, and Merchandising (1–3). (S/U grade only.) May be repeated to a maximum of six (6) 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 (12) semester hours.

CTE 6936r. Special Topics in Clothing/Textiles/Merchandising (3). 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 (12) semester hours.

CTE 6980r. Dissertation (1–24). (S/U grade only.)

CTE 8964r. Preliminary Doctoral Examination (0).

CTE 8966r. Master's Comprehensive Examination (0).

CTE 8976r. Master's Thesis Defense (0).

CTE 8985r. Dissertation Defense (0).

HHD 5136. Accessible Housing (3). An analysis of housing needs and constraints for the elderly and physically challenged, including housing design features, community services, and public policy.

HHD 5251. Environment and Human Behavior (3). The interrelationship between the built environment and the behavior of people including physical, psychological and social needs.

HHD 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of six (6) semester hours.

HHD 5915r. Supervised Research (1–3). (S/U grade only.) May be repeated to a maximum of three (3) semester hours.

HHD 5942r. Supervised Teaching (1–3). (S/U grade only.) May be repeated to a maximum of three (3) semester hours.

HHD 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required for the master's degree.

HHD 8966r. Master's Comprehensive Examination (0).

HHD 8976r. Master's Thesis Defense (0).

HOE 6938r. Proseminar in Home Economics (1). (S/U grade only.) Doctoral students only. Repeatable up to a maximum of two (2) semester hours.

THEATRE

School of Theatre

Professors: S. Baker, Byrnes, Chappell, Dahl, Jordan, Judy, Karioth, Lazier, Muscha, Richey, Simmons, Wallace; *Associate Professors:* Cooper, Degen, Gelabert, Hogan, Holshue, Leahy, Lickson, Redmond, Simotes; *Assistant Professors:* Archbold, Coleman, Edmondson, Gonzalez, Hale, Sandahl; *Visiting Associate Professor:* Steger; *Burt Reynolds Eminent Scholar Chair in Theatre:* Medoff; *Hoffman Eminent Scholar Chair in Theater:* TBA; *Visiting Eppes Professor:* Jane Alexander; *Visiting Assistant-in-Residence and Professor:* Sherin; *Professor Emeritus:* Fallon

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.

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, scene design, costume design, lighting design, technical theatre, 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.

For complete details of degree requirements, plus a description of the school, its facilities, and opportunities, refer to the "School of Theatre" chapter of this *Graduate Bulletin*.

Definition of Prefixes

THE — Theatre (general)
TPA — Theatre Production and Administration
TPP — Theatre Performance and Training

Graduate Courses

THE 5084r. Theatre Problems (3). Topics change each semester depending upon instructor. May be repeated to a maximum of six (6) semester hours.

THE 5119. Masters of Modern Drama (3). This course is a comprehensive study of the history and dramatic literature of the modern theatrical era.

THE 5120. Advanced Theatre History I: Classical and Medieval (3). This course examines the origins of theatre: Classical Greece and Rome; Japanese Kabuki/Noh/Bunrak; 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 orgins 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 (6) semester hours.

THE 5273r. Seminar: Selected Topics in History of Performance (Acting and Directing) (3). Prerequisite: Two undergraduate theatre history courses or consent of instructor. 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 (6) semester hours.

THE 5274. Seminar: Theory and History of Directing (3). A study of the art of directing for the stage, from theoretical and historical viewpoints.

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 consent of instructor. 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 (6) 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 playtext 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 precolonial performance traditions, written plays, and contemporary popular culture, this course examines the cultural and political complexities of selected countries of sub-Saharan Africa.

THE 5485. Shakespearean Dramaturgy (3). An exploration of the issues in Shakespearean scholarship relevant to performance, including those related to text, criticism, and the cultural contexts of the plays.

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 5506. Seminar: Dramatic Theory and Criticism 20th Century (3). A study of theatrical forms and ideas from the emergence of Romanticism in France to the American theatre of the 1960s. Writers such as Ibsen, Chekhov, Jarry, Brecht, Artaud, Genet, and Grotowski are studied in their historical and aesthetic contexts.

THE 5541. Seminar in Theatrical Theory: The Tragic Dramatic Form (3). Exploration of theories of tragedy; applications of theoretical frameworks to script analysis and performance. Theories of writers such as Aristotle, Horace, Dryden, Nietzsche, Langer, and Frye are applied to classic and modern tragedies.

THE 5542. Seminar in Theatrical Theory: The Comic Dramatic Form (3). An exploration of comic theory and practice; applications of theoretical frameworks to script analysis and performance. Theories of writers such as Bergson, Freud, Langer, and Frye are applied to classic and modern comedies.

THE 5905r. Directed Individual Study (1-3). (S/U grade only.) May be repeated to a maximum of twelve (12) 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 (5) semester hours. A maximum of three (3) hours may apply to the master's degree.

THE 5918r. Theatre Tutorial (1–3). (S/U grade only.) Prerequisite: graduate students in theatre only. Selected topics in theatre. May be repeated to a maximum of six (6) 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 (12) semester hours.

THE 5927r. Graduate Theatre Laboratory (2). (S/U grade only.) Practical work in publicity, management, scenery, costumes, and stage management. May be repeated to a maximum of six (6) 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 (12) semester hours.

THE 5943r. Supervised Teaching (1–5). (S/U grade only.) Prerequisite: Consent of instructor. Faculty visits and observes student teaching in theatre. May be repeated to a maximum of five (5) semester hours. A maximum of three (3) semester hours may apply to the master's degree.

THE 5971r. Thesis (3–6). (S/U grade only.) Six (6) 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 (9) semester hours. Six (6) semester hours credit required.

THE 6272. Seminar: Theory and History of Acting (3). A study of the art of acting, from philosophical, psychological, semiological, anthropological, and historical viewpoints.

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 6915. Doctoral Research Potentials (0). (S/U grade only.) Introduction to research possibilities within various specialized areas of theatre.

THE 6980r. Dissertation (1–12). (S/U grade only.)

THE 8963r. MFA Qualifying Examination (0). Taken at the end of first semester 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). (S/U grade only.) Taken after student has taken or is registered for a minimum of forty-eight (48) hours.

THE 8966r. Master's Comprehensive Examination (0). Normally taken the last semester of course work.

THE 8976r. Thesis Defense (0). The purpose of this class is to acquaint students with current model building techniques and systems. Students will gain experience in constructing most of the elements commonly associated with models such as doors, windows

THE 8978. Defense MFA Degree (0). Form varies; may include portfolio review or vita presentation. Taken during one of the last two semesters of residency.

THE 8985r. Dissertation Defense (0). 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 assiciated 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). Prerequisite: TPA 5025. 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-prescenium venues.

TPA 5027. Lighting Design III (3). Prerequisite: TPA 5026 or permission of instructor. 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). Prerequisite: TPA 5027. 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). Prerequisite: TPA 5028. 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 designers role throughout the production process. May be repeated once when content varies to a maximum of six (6) 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 (6) 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 (6) 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: Consent of instructor. Emphasis in scenic, costume, and lighting design for the stage. May be repeated to a maximum of sixty (60) 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 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 5227. Theatrical Lighting Technology (3). This course explores a variety of practical skills and tools that are necessary for a career as a master electician, programmer or other non-design applications. It encompasses work in electricity, trouble shooting, special effects, light board programming and advanced technology.

TPA 5231. Advanced Costume Crafts (3). A further exploration of various advanced costume craft techniques and materials. Includes mechanical moveable parts, electrical lightpacks and fog packs, and culminates with a highly evolved researched project. Each project must address the proper fit, comfort, movement, weight, and sight considerations needed for successful theatrical craft apparel.

TPA 5235r. Selected Topics in Stage Costuming and Make-Up Technology (3). Prerequisites: THE 4260; TPA 3230C, 3248, or consent of instructor. 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 (6) semester hours.

TPA 5237r. Selected Topics in Costume Design for the Stage (3). Prerequisites: TPA 4040, or consent of instructor. 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 (6) 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 throughtout history. Students gain practicall experience in designing and constructing makeup, hair and wigs.

TPA 5280r. MFA Practicum in Technical Theatre (2–15). Prerequisite: Consent of instructor. 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 (60) semester hours.

TPA 5285. Technical Production and Management (3). Prerequisite: TPA 5207 or instructor approval. 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: Consent of instructor. 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 six (6) semester hours.

TPA 5287. Advanced Costume Patterning (3). Prerequisite: TPA 4239 or permission of instructor. 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 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 5407. Fundraising in the Arts. (3). This course is designed to help the student develop an overview of the process of raising funds for arts organizations. It will develop practical strategies for implementing comprehensive fundraising programs in arts organizations and develop research, writing, and presentation skills.

TPA 5408. Business and Legal Issues in the Arts (3). Prerequisite: TPA 4400 or instructor approval. 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 approval. 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 5470r. MFA Practicum in Management (2–15). Prerequisite: Consent of instructor. 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 (60) 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 personnnel in an arts organization.

TPA 5905r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve (12) 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 (12) 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 (60) 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 (30) 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 (6) semester hours.

TPA 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 5284r. MFA Practicum in Acting (1–15). Prerequisite: Consent of instructor. Conservatory study in professional actor training in conjunction with the Asolo State Theatre in Sarasota. May be repeated to a maximum of sixty (60) semester hours.

TPP 5380r. MFA Practicum in Directing (2–15). Prerequisite: Consent of instructor. 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 (60) semester hours.

TPP 5381–5384.Problems in Directing (three [3] hours each). Prerequisites: TPP 4310, 4311; and/or consent of instructor. 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 (6) 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 (6) 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 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 (6) 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 (6) semester hours.

TPP 5906r. Directed Individual Study (1-3). (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.

TPP 5940r. MFA Internship in Theatre Performance (2–15). (S/U grade only.) Prerequisites: Completion of sixty (60) 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 (30) 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

Chair: Charles Connerly; *Professors:* Connerly, Cowart, Stiftel; *Associate Professors:* Audirac, Deyle, Doan, Miles, Thompson; *Assistant Professors:* Chapin, Smutny; *Planner-in-Residence:* Higgins; *Professors Emeriti:* Frank, RuBino

The Field of Planning

While traditionally organized to coordinate the physical layout of cities, the profession of Urban and Regional Planning has grown to encompass all aspects of the systematic 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. Major changes in the field occurred during the middle twentieth century. In response to the Great Depression of the 1930s, the federal government embarked upon an expanded program of national economic planning, setting precedents for vastly increased federal activities in social and economic programming. During the post-WWII era, rapid population growth and suburbanization stimulated a concern for increased urbanization, the organization of metropolitan areas, and the decaying core of inner cities. In the 1960s and early 1970s, the focus shifted to these inner cities, with increasing attention given to problems of race, housing, poverty, and social equity. The 1970s and 1980s witnessed an increasing environmental consciousness and significant new programs and policies aimed at preserving and enhancing the natural environment, along with increasing concern for economic development, the coordination of public and private developing efforts, and efforts to work with decaying infrastructure. The 1990's featured increased attention to the impact of globalization on the theory and practice of planning.

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 is resulting in the establishment of new priorities and the emergence of new policy directions, including attention to job growth, global competitiveness, environmental sustainability, human service delivery systems, affordable housing, access to health services, and the provision and financing of roads, infrastructure, and public services.

As an institutional and professional activity, planning is now practiced in both the private sector and within the public sector at all levels of government. At each stage in its development 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. Planning's initial concern with the form and structure of cities continues, but has grown to include all aspects of the formulation and implementation of public policy, at all levels of society.

What unites persons from these various backgrounds into the professional field of planning is a common focus and approach. While both the problems and the means for dealing with them may differ, all planners are concerned with studying public 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**. 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 round 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 an exciting field. It is beset by challenges that are created by the difficulties in finding solutions to problems and in obtaining a consensus among diverse interests on common policies and programs. At the same time, it is a rewarding field. Planners have the assurance of knowing that they are making 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), dual degrees in planning and law (MSP/JD), and dual degrees in planning and public administration (MSP/MPA). 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 dual 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.

The department is located in the state capital, thereby offering students opportunities for interacting with the central executive, legislative, and judicial offices of the state. The school 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. Student backgrounds are highly diverse; many come from the social sciences, engineering, architecture and the design arts, social work, or the physical sciences. While we are not indifferent to student backgrounds, 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 averages about 80 to 100. With 12 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.

Nearly 1000 students have graduated from the department's graduate programs. These graduates are now employed in 40 states and 23 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 (48) semester hours of course work organized into the following curriculum components:

Core curriculum: twenty-one (21) semester hours;

Elected specialty area: twelve to fifteen (12–15) semester hours;

Internship: zero (0) semester hours;

Capstone requirement: Three to six (3–6) semester hours; and

Electives: remainder.

Core Curriculum

URP	5101	Planning Theory and Practice (3)
URP	5125	Plan Implementation (3)
URP	5201	Methods of Planning Analysis I: Research (3)
URP	5211	Methods of Planning Analysis II: Statistics (3)
URP	5222	Analysis for Planning Decisions (3)
URP	5261	Methods of Planning Analysis III: Plan Development (3)
URP	5847	The 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; and
- Transportation planning

All specializations are composed of two to 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 microcomputer 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 20 station College of Social Sciences lab. General microcomputer applications (including spreadsheets, statistical software, and word processing) are supported in an eight station department lab, the department's planning studio facility, and the College of Social Science's 30 station lab.

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 in their last semester. 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 (3) semester hours under URP 5910, Directed Individual Research.

Under the project option, students pursue work on an aspect of a larger professional topic undertaken for a client and completed within the context of a planning group. This option is completed under URP 5311, Advanced Planning Problems, for three (3) 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 (6) 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 5201 (core), URP 5211 (core), URP 5847 (core), URP 5930 (zero [0] hours);

Spring, First Year: URP 5125 (core), URP 5261 (core), specialty, specialty or elective, URP 5930 (zero [0] 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, specialty or elective.

Dual Law-Planning Degree Program

The Department of Urban and Regional Planning and the College of Law offer a dual degree program that allows students to qualify for both the master's of science in planning and the juris doctor degrees in substantially less time than would be necessary to achieve each independently. Total semester hours required are one hundred eleven (111), of which thirty-three (33) are taken in planning and seventy-eight (78) in law.

Applicants to this program must meet the separate admission requirements of each unit, including satisfactory performance on the GRE for admission to planning and satisfactory performance on the LSAT for admission to law. Applicants to the MSP/JD dual degree program should make formal application through the admissions office of both the Department of Urban and Regional Planning and the College of Law using the dual degree program's unique major code (313415). Students enrolled in JD studies may make application to the MSP program, but only before completion of their first year.

Students enrolled in the dual degree program pursue both degrees concurrently, spending their first year in full-time coursework in either unit, and the second year in the other. Thereafter, a mixture of coursework from both units should be followed. Students who begin their program by taking their first year of courses in planning must complete a minimum of nine (9) additional semester hours of planning courses subsequent to the completion of the first year of law.

Dual 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.

Dual 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 plans.

Very few persons achieve professional competence in both fields. Those who do possess substantial career flexibility and attractiveness to prospective employers. The dual degree program at The 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 dual 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 dual degree program's unique major code (327777). A full photocopy of all application materials should be sent to the second unit's admissions office simultaneously. To be admitted to the dual 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 (24) semester hours of study, may apply to the second department. Admission to that department shall constitute admission to the dual degree program.

Total degree hours required for the dual degree is sixty-six (66). 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 either URP 5222 **or** PAD 5307. 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. It is expected that the student will complete the internship in one unit and the capstone/action paper in the other.

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 requirements 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.

Peace Corps Master's Internationalist Program

The United States Peace Corps and The Florida State University have signed an agreement under which qualified Florida State University graduates in urban and regional planning may serve in the Peace Corps and provide urban planning assistance to developing nations. Over three–quarters of the world's population now lives in developing nations and an increasing percentage of this population resides in rapidly growing urban areas. The Master's Internationalist Program at The Florida State University is designed to ensure a steady stream of volunteers for the planning of these rapidly growing urban areas. Students in the joint program will pursue the planning for developing areas specialization and will focus on development trends in cities and regions of the third world as well as the peripheral areas of more developed countries.

Students wishing to apply for this program should apply to the Peace Corps and the Department of Urban and Regional Planning simultaneously. Acceptance into the Master's Internationalist Program is competitive with space for no more than

five students annually. It is not anticipated that applicants will have extensive overseas experience, but indications of previous exposure to issues of third world development through travel, course work, or other sources of inspiration will be favorably considered. Students considering this program are encouraged to complete their applications to the Peace Corps as quickly as possible, since the Peace Corps process may take from eight to ten months for final acceptance.

Students who have not received their acceptance to the Peace Corps, but who have been accepted by the department by the beginning of the semester may enroll as regular students and may be considered as alternates in the program should additional openings become available. Typically from three to six months before the completion of the degree a student is notified of his/her volunteer assignment. Students should anticipate a field posting shortly after completion of the final semester.

Dispute Resolution Minor

The dispute resolution minor provides an opportunity for MSP students to develop expertise in dispute resolution in conjunction with their professional planning studies. The minor is expected to assist public policy communities in reaching a consensus and helping stakeholders in the planning system to resolve impasses. It is a complement (not a replacement) of a degree specialization. PhD students in urban and regional planning may use the dispute resolution minor to advance scholarly interests in policy consensus building or stakeholder participation. For doctoral students, the minor is an addition to other degree requirements.

Only admitted, degree-seeking students in the master of science in planning (MSP) or PhD in urban and regional planning programs are eligible to elect the minor. Matriculated MSP students indicate their intent to pursue the dispute resolution minor by memorandum to the MSP program director. This memo must be approved by the student's major professor and the department's dispute resolution minor advisor. Matriculated PhD students indicate their intent to pursue the dispute resolution minor by incorporating it in their program statement which must be approved by the student's supervisory committee. Students electing the minor are expected to seek advice and to have their course planning approved by the department's dispute resolution minor advisor.

To earn the dispute resolution minor in conjunction with the MSP or PhD degree in urban and regional planning, students must complete at least twelve (12) semester hours of dispute resolution coursework. A list of these courses can be obtained from the department's dispute resolution minor advisor. At least nine (9) hours must be taken outside the Department of Urban and Regional Planning.

A MSP student may complete these requirements along with all other MSP program requirements within the minimum forty-eight (48) semester hour degree requirement. Depending on specialization, doing so may require that one dispute resolution course be acceptable as a specialization elective. PhD students may or may not be able to complete the minor within the forty-two (42) semester hours of required doctoral coursework, depending on other aspects of the chosen program. To ensure effective choices among the options, students should discuss their proposed program with their major professor *and* with the URP dispute resolution minor advisor early in their studies.

Doctoral Program

The 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. The program requires a minimum of forty-two (42) semester hours of study in three areas: theory, research methods, and planning applications. The theory area consists of twenty-one (21) semester hours of course work in urban and regional theory, planning theory, and advanced work in a substantive body of theory related to the student's program of study. The research methods area consists of a minimum of nine (9) semester hours of courses chosen from a variety of research and methodological courses that contribute to the student's ability to undertake independent research and analysis. The planning applications area consists of a minimum of twelve (12) semester hours of thematically related courses in a policy or program area. This may be one of the department's functional specializations or may be a theme that cuts across or builds upon these specializations. The specific content of a student's program of study is determined in conjunction with a faculty supervisory committee.

Completion of the doctoral degree requires: 1) a qualifying examination taken shortly after entry into the program and designed to test the student's readiness for advanced course work; 2) a preliminary examination taken at the end of the period of course work and designed to gauge creative and critical thinking abilities; and 3) a dissertation intended to be an original contribution to knowledge in the field.

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 March 1st for Fall admission and September 1st for Spring admission. Earlier deadlines apply for financial aid candidates and for applications from non-U.S. students, however. Financial aid applicants applying for Fall admission must submit all materials by January 15th. The deadlines for non-U.S. students are described below. Persons applying after the appropriate deadline will be considered on a space-available basis only.

Applications for admission to the MSP program are welcomed from persons holding a bachelor's degree from an accredited institution of higher learning in the United States, or the equivalent from an institution abroad. No specific major is required, but persons contemplating planning graduate studies are encouraged to earn their undergraduate degree in the humanities (including English or history), a social science (including economics, geography, political science or sociology), or a design profession (including architecture or engineering). Other majors may be appropriate for persons who intend to specialize in particular fields, such as natural or physical science (biology, chemistry, or geology) for environmental planning, a business major (real estate or finance) for housing, economic development or growth management, or a health major for health planning.

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 this 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 a copy of the department's graduate guide may be obtained by writing to *Admissions Assistant, Department of Urban and Regional Planning, The Florida State University, Tallahassee, Florida 32306-2280 U.S.A.* Information and application materials may also be obtained from the department's website: *http://www.fsu.edu/~durp*.

Letters of recommendation should be requested from those best able to accurately assess the scholastic and potential accomplishments of the applicant. These should be submitted in the author's

own format or on a form provided for this purpose and should speak directly to the applicant's ability to complete graduate study in urban and regional planning. Two (2) 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.

Ordinarily, an applicant must have either a grade point average (GPA) of 3.0 or higher for the last two years of undergraduate studies, or a combined verbal and quantitative GRE score of at least 1000 in order to be considered for admission. The admissions committee conducts a thorough review of all available credentials in its deliberations, however. 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 January 15th for Fall term admission, and by July 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 an official transcript of the Test of English as a Foreign Language (TOEFL). A TOEFL score of 550 (paper test) or 213 (computer test) is required before admission will be considered. Information on this examination may be obtained from the Educational Testing Service in Princeton, New Jersey, or from U.S. embassies and consulates worldwide. 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 *Office of International Admissions, The Florida State University, Tallahassee, Florida 32306-2400 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 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, interorganization cooperation, and public participation.

URP 5131. Legal Foundations for Planning (3). Majors only. Introduces the concepts, issues, and major legal decisions affecting the role of planning in the governmental process. Considers the role of federal and state constitutional laws as they affect planning activities, the basic requirements of administrative law and procedures, and the role of courts and legislatures in the control of land use, development, and the planning of services and facilities.

URP 5342. Advanced Planning Problems (3). Prerequisites or Corequisites: URP 5222, 5261; permission of instructor. 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 5504. Planning for Social Change and Citizen Participation (3). Concerned with planning as an instrument of purposive social change. Topics include social change models, advocacy planning as an approach to social change, and citizen participation in planning and policy development.

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. Methods of Planning Analysis I: Research and Evaluation (3). Focuses on the scientific social research process in planning, including: 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; program evaluation; and computer use.

URP 5211. Methods of Planning Analysis II:Statistics (3). An introduction to descriptive and associative statistics as applied to public policy problems encountered by planners. Covers basic definitions and descriptive measures, probability theory, distributions, sampling, and inference. Elementary multivariate techniques are treated, including those appropriate to the analysis of nominal and interval scales.

URP 5222. Policy Analysis for Planning Decisions (3). Prerequisites: URP 5101, 5201; or permission of instructor. Majors only. 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, and cost benefit and cost effectiveness in the assessment of alternative courses of action.

URP 5257. Fiscal Impact Analysis (3). An introduction to cost estimation and fiscal impact techniques. Students are required to apply the appropriate methodologies to an actual development, evaluating the assumptions, limitations, accuracy, and sufficiency of the estimates produced.

URP 5261. Methods of Planning Analysis III: Plan Development (3). Prerequisite: URP 5845, 5201, a graduate statistics course, or permission of instructor. Deals with the methods used in plan analysis and development. Emphasis is given to demographic analysis and population projection techniques, economic base analysis and other methods of economic projection, and 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 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 subnational 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.

URP 5619r. Special Topics in Development Planning (3). Seminar that provides for the examination of selected development planning issues and problems not addressed in other courses. Specific content varies. May be repeated when topics vary.

Environmental Planning and Natural Resource Management

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 permission of instructor. 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 5428. Pollution Control (3). Develops a working understanding of the technological and management options for controlling and preventing air, water, and solid waste pollution. Principles of environmental epidemiology, risk assessment, and environmental fate and transport provide a framework for understanding pollution risks to human health and the environment.

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 (6) 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). Prerequisite: URP 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 (6) 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). 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.

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). Prerequisite: URP 5717 or permission of instructor. 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.

URP 5719r. Special Topics in Transportation Planning (3). A special topics seminar provides for the examination of selected transportation problems and issues. Specific content varies. May be repeated to a maximum of six (6) semester hours.

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 5745. Housing and Community Development Methods (3). Prepares students in key skills needed to study and measure housing demand and supply. The first part of the course is spent on understanding and applying techniques for measuring housing need and demand. The remainder of the course focuses on the real estate finance skills and techniques commonly used to develop low-income housing.

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 (6) semester hours.

Planning for Health and Aging

URP 5520. The U.S. Health Care System (3). Examines the structures, policies, resources, and services of the U.S. health care system, including both the public and private sectors and systems for acute, chronic, and long-term care. Focuses on planning and policy needs and implications.

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 5530. Policy and Planning for the Aging (3). An examination of the problems of the aged and appropriate legislation and planning practice. Topics include contrasting theories of intergenerational relations, formal and informal support systems, current social policy and planning practices, and social provision for the aged in other countries.

Other Graduate Courses

URP 5905r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

URP 5910r. Directed Individual Research (1–3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

URP 5930r. Professional Topics in Urban and Regional Planning (0). (S/U grade only.) Majors only. This course is offered at zero (0) 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 (9) semester hours.

URP 5971r. Thesis (3–6). (S/U grade only.) A minimum of six (6) hours must be earned.

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 (3) 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).

URP 8976r. Master's Thesis Defense (0).

URP 8985r. Dissertation Defense (0).

VISUAL DISABILITIES
see Special Education

Program in WOMEN'S STUDIES

College of Arts and Sciences

Director: Joyce Carbonell (Psychology/Women's Studies); *Participating Faculty:* Hartwell (Art); Finnegan (Art Education); Bearor (Art History); deGrummond, Fulkerson, Sickinger, Tatum (Classical Languages, Literature, and Civilization); Jordan, Nudd (Communication); Bush-Baskette, Peterson (Criminology and Criminal Justice); Young (Dance); MacDonald, Monkman, Schwartz (Educational Leadership and Policy Studies); Cooper, Gardner, Laughlin, McGregory, Montgomery, Ortiz-Taylor, Picart, Rowe, Saladin (English); Green, Hadden, Sinke (History); Boutin, Cappuccio, Cloonan, Graham-Jones, Poey, Stanley, Walters (Modern Languages and Linguistics); Davis (Nursing); Marcus (Oceanography); Morales (Philosophy); Kemp (Political Science); Carbonell (Psychology); Erndl, Kalbian, Kavka (Religion); Maxwell (Social Work); Brewster, Martin, Padavic, Reid (Sociology); Lynn (Sport Management); Davis (Textiles and Consumer Sciences); Gonzales, Sandahl (Theatre); Miles (Urban and Regional Planning)

Women's studies courses are taught by faculty in more than 20 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. Women's studies 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 The Florida State University will find a rich array of materials on women and gender in the government document holdings and numerous microform manuscript collections of the 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, *214A 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.

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 (9) semester hours of approved courses. A women's studies minor at the PhD level shall consist of twelve (12) 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.

Graduate 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)
AMH	5568	Colonial and Revolutionary Era America Woman's History (4)
ARH	5875	20th-Century Feminist Art Criticism (3)
EDA	5227	The Role of the Woman Administrator in Education (3)
EDF	5706	Gender and Education in Comparative Perspective (3)
HEE	5347r	International Home Economics (1–3)
LIT	5388r	Studies in Women's Writing (3)
PET	5252	Gender Issues in Sport and Physical Activity (3)
PET	5257	Lesbian and Gay Sport Studies (3)
REL	5675	Gender and Judaism (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)
SPC	5639	Rhetoric of Women's Issues (3)
SPW	5486	Contemporary Spanish Women Writers (3)
SPW	5496	Spanish-American Women Writers (3)
SYD	5817	Contemporary Theories of Gender (3)
SYO	5185	Family and Work Linkage (3)
SYO	5376	Sociology of Gender and Work (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 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 (3) 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 (6) 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 (6) semester hours.

ZOOLOGY
see Biological Science

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GRADUATE FACULTY

Membership on the graduate faculty falls into one of five categories on the basis of functional responsibility:

1. **Graduate Faculty Status:** Authorized to teach graduate level courses only. Not listed.

2. **Masters Directive Status:** Authorized to serve as major professor of masters degree students and teach graduate courses. Listed with a dot (•) preceding name.

3. **Doctoral Directive Status:** Authorized additionally to serve as major professor for doctoral students. Listed with cross (+) preceding name.

4. **Holders of Doctoral Directive Status** awarded by the University of Florida for a cooperative program. Listed with an asterisk (*) preceding name.

5. **Codirective Status:** Not listed.

Changes in faculty made after September 30, 2002 may not be reflected in the following list

Abbot, Frederick M., Edward Ball Eminent Scholar and Professor of Law, J.D. 1977, Yale; LL.M. 1989, Cal. Berkeley. Fields: International Trade, Intellectual Property, International Intellectual Property, Public International Law.

+ **Abdel Razig, Yassir,** Assistant Professor of Civil and Environmental Engineering, Ph.D. 1999, Northwestern University. Fields: Construction Engineering and Management, Computer Applications in Civil Engineering, GPS/GIS Application, Intelligent Engineering Systems, Simulation Modeling of Engineering Systems.

• **Abdullah, Makola,** Assistant Professor of Civil and Environmental Engineering, Ph.D. 1994, Northwestern University. Fields: Structural Dynamics, Active Control, Earthquake Wind Engineering.

+ **Abele, Lawrence G.,** Provost, and Professor of Biological Science, Ph.D. 1972, University of Miami. Fields: Ecology, Community Biology, Systematics of Decapod Crustaceans.

+ **Abell, Joseph N.,** Associate Professor of Social Work, Ph.D., Florida State University. Fields: Child Welfare, Social Work Research, Family Social Work, Health.

• **Abichou, Tarek**, Assistant Professor of Civil and Environmental Engineering, Ph.D. 1999, University of Wisconsin. Fields: Environmental Geotechnics, Geotechnical Engineering, Performance of Waste Containment Systems, Beneficial Use of Industrial By-products, Groundwater Remediation, Flow in Porous Media.

+ **Abood, Doris A.,** Associate Professor of Nutrition, Food, and Exercise Science, Ph.D. 1981, University of Tennessee at Knoxville. Fields: Health Behavior, Stress, Wellness, Drug Education.

• **Adamovich, Ljubisa**, Director of Asian Studies and Professor of Economics, Asian Studies and Russian and East European Studies, Ph.D. 1961, University of Belgrade. Fields: Comparative economic systems, economics of transition, international economics.

• **Adams, Jonathan,** Associate Professor of Communication, Ed.D. 1995, Boston University. Fields: Professional Collaboration and Computer-mediated Communication, Computer-mediated Communication Systems, Interactive Multimedia Development.

• **Adams, Todd,** Assistant Professor of Physics, Ph.D. 1997, University of Notre Dame. Fields: Experimental Physics, Elementary Particle Physics.

• **Adolph, Winnifred R.**, Associate Chair and Associate Professor of Modern Languages and Linguistics, Ph.D. 1978, University of North Carolina at Chapel Hill. Fields: German Literature of the Nineteenth Century, Drama and Pedagogy.

+ **Aggarwal, Sudhir,** Professor of Computer Science, Ph.D. 1975, University of Michigan. Fields: Computer Networks, Distributed Systems, Real-time Systems, Search Engines and Databases, Design Analysis of Protocols.

+ **Ahlquist, Jon E.,** Associate Professor of Meteorology, Ph.D. 1981, University of Wisconsin. Fields: Planetary-Scale Dynamics, Nonlinear Systems.

• **Akbar, Naim**, Associate in Clinical Psychology, Ph.D. 1970, University of Michigan. Fields: Cultural Determinants of Personality, Mental Health Issues of African-Americans, Philosophy of Science.

+ **Alabugin, Igor V.,** Assistant Professor of Chemistry, Ph.D. 1995, Moscow St. University. Fields: Photochemical Triggering of Reactions in Solution and in Crystals, Abinitio Calculations on Orbital Interactions and Stereoelectronic Effects in Ground-and Excited-state Reactions, Polymer Imprinting for Control of Guest Reactivity.

+ **Alamo, Rufina G.,** Associate Professor of Chemical Engineering and Associate Scholar/Scientist, Institure of Molecular Biophysics, Ph.D., Madrid.

+ **Aldrovandi, Ettore**, Assistant Professor of Mathematics, Ph.D. 1992, International School for Advanced Studies - Italy. Fields: Algebraic Geometry, Complex Analysis.

• **Allaire, Joseph L.,** Associate Professor of Modern Languages and Linguistics, Ph.D. 1966, Wayne State University. Fields: French Literature of the Renaissance and Eighteenth Century, French Theater (Post Classical to the Absurd).

+ **Allen, Michael L.,** Associate Professor of Music, Ph.D., University of North Texas. Fields: String Education.

+ **Allen, Susan D.**, Professor of Chemistry, Ph.D. 1971, University of Southern California. Fields: Laser Processing of Materials and Devices, Laser-based Surface Analysis.

+ **Allison, Barbara**, Assistant Professor of Family and Child Sciences, Ph.D. 1998, Ohio State University. Fields: Adolescent Development, Parent/Early Adolescent Relationships and Implications for Teaching Family and Consumer Sciences Education.

+ **Almarza, Dario**, Visiting Assistant Professor of Elementary Education, Ph.D. 1997, University of Iowa. Fields: Social Studies Education; Multicultural Education.

• **Al-Otaiba, Stephanie**, Assistant Professor of Special Education, Ph.D. 2000, Vanderbilt University. Fields: Reading Intervention, Adapting the General Education Curriculum.

• **Altholz, Judith A.**, Assistant Professor of Social Work and Assistant Dean, School of Social Work, Ph.D. 1981, Florida State University. Fields: Clinical Social Work Practice, Mental Health Issues, Caregiving and Aging.
Altmann, Curtis, Assitant Professor of Biomedical Sciences, Medicine, Ph.D. 1995, University of California. Fields: Biochemistry, Molecular Biology.

+ **Aluffi, Paolo,** Professor of Mathematics, Ph.D. 1987, Brown. Fields: Algebriac geometry, intersection theory, singularities, and enumerative geometry.

+ **Alvi, Farrukh**, Associate Professor of Mechanical Engineering, Ph.D. 1992, Penn State University.

• **Anderson, Leon**, Assistant Professor, School of Music, MM 1996, Southeastern Louisiana University. Fields: Music Performance, Jazz Studies.

+ **Anderson, Loran C.,** Professor of Biological Science, Ph.D. 1962, Claremont Graduate School. Fields: Plant Systematics, Anatomy, Cytotaxonomy, Floristics.

+ **Anderson, Rodney D.,** Professor of History, Ph.D. 1968, American University. Fields: Latin America, Mexico.

+ **Anderson, Thomas L.,** Professor of Art Education, Ph.D. 1983, University of Georgia. Fields: Art Criticism and Theory, Art History, Art Education.

• **Andrews, Pamela L.,** Associate Professor of Music, MM 1971, University of Miami. Fields: Double Bass Performance, Music Education.

+ **Ang, James S.,** Eminent Scholar and William O. Cullom Professor, Finance, Ph.D. 1972, Purdue University. Field: Corporate Finance.

+ **Anthony, William P.,** Professor of Management, Ph.D. 1971, Ohio State University. Fields: Strategic Management, Strategic Human Resource Management, Organization Theory.

+ **Arce, Pedro E.,** Associate Professor of Chemical Engineering, Ph.D., Purdue University. Fields: Fluid Mechanics and Heat Transfer in Material Processing, Mechanics and Rheology of Composite Fluids, Pulsed Energized Reactors in the Removal of Pollutants from Combustion Processes.

• **Archbold, Ann M.,** Assistant Professor of Theatre, MFA 1999, San Diego State University.

+ **Arias, Santa,** Associate Professor of Modern Languages, Ph.D. 1990, University of Wisconsin-Madison. Fields: Spanish American Colonial Literature, Nineteenth – century Spanish American Literature, Sixteenth – and Seventeenth – century Spanish Literature, Historical Linguistics.

+ **Armer, J. Michael,** Professor of Sociology, Ph.D. 1964, University of Wisconsin. Fields: National Development and Social Change, Sociology of Education, Social Psychology, Comparative Sociology.

+ **Arnold, Anthony J.,** Associate Professor of Geological Sciences, Ph.D. 1982, Harvard University. Fields: Paleontology, Evolutionary Theory.

• **Aronovitch, Sharon A.,** Assistant Professor of Nursing, Ph.D. 1994, Adelphi University.

+ **Arora, Krishna,** Associate Professor of Electrical and Computer Engineering, Ph.D. 1976, Indian Institute of Technology (Delhi). Fields: Optical Fiber Systems, Signal Processing, Communication Theory and Systems.

+ **Arora, Rajendra K.,** Professor of Electrical and Computer Engineering, Ph.D. 1965, University of St. Andrews. Fields: Optoelectronics, Quasi-Optics, VLSI Interconnects, Microwave and Millimeter Wave Techniques, Microwave Integrated Circuits, Superconductivity.

+ **Aspinwall, Leslie**, Associate Professor of Mathematics Education, Ph.D. 1994, Florida State University. Fields: Students' Conceptual Understanding of Elementary Calculus, Middle School Students' Probabilistic Understanding.

• **Atkeson, Beverly**, Director, Research Programs/Services, Ph.D. 1976, University of Georgia. Fields: Evaluation and Testing of School-Age Children Experiencing Academic and Behavior Problems.

+ **Atkins, Burton M.**, Director of International Affairs and Professor of Political Science, Ph.D. 1970, University of Kentucky. Fields: Public Law, Courts and Judicial Behavior, Domestic Public Policy.
Atkinson, Robert E., Jr., Professor of Law, J.D. 1982, Yale University School of Law. Fields: Property, Nonprofit Organizations, Ethics.

+ **Audirac-Zazueta, Ivonne**, Associate Professor of Urban and Regional Planning, Ph.D. 1988, Florida. Fields: Sustainable Development, Growth Management, Neo-Traditional Design.

• **Austin, Anjali,** Associate Professor of Dance, Certificate in Classical Ballet. Fields: Ballet Technique.

+ **Awoniyi, Samuel,** Professor of Industrial Engineering, Ph.D., Cornell University. Fields: Applied Optimization, Maintenance Engineering.

+ **Baer, Howard A.,** Professor of Physics, Ph.D., Wisconsin. Fields: Theoretical High Energy Physics.

+ **Bailey, Jon Scott,** Professor of Psychology, Ph.D. 1970, University of Kansas. Fields: Applied Behavior Analysis, Classroom Management, Research Methods in Applied Behavior Analysis, Business and Industry, Behavioral Diagnostics.

+ **Bakan, Michael B.,** Associate Professor of Music, Ph.D. 1993, University of California, Los Angeles. Fields: Indonesian Music Cultures (specialization in Balinese gamelan), American Music Cultures (African-American, jazz, popular music, film and television music, electronic and computer music).

+ **Baker, Earl J.,** Associate Professor of Geography, Ph.D. 1974, University of Colorado. Fields: Behavioral, Environmental, Natural, and Man-Made Hazards; Quantitative Methods.

+ **Baker, Stuart E.,** Service Professor of Theatre, Ph.D. 1977, City University of New York. Field: Dramatic Theory and Criticism.

+ **Baker, Theodore P.,** Professor of Computer Science, Ph.D. 1974, Cornell University. Fields: Real-Time Systems, Theory of Parsing, Translation and Compiling, Ada Run Time Environments, Tools and High-Level Languages for Real-Time Software Interfaces.
Baldwin, Margaret A., Associate Professor of Law, J.D. 1984, University of Minnesota Law School. Fields: Civil Rights Survey, Criminal Procedure, Federal Courts, Prostitution and Pornography, Race, Gender and Law.

+ **Baldwin, Thomas L.**, Assistant Professor of Electrical Engineering, Ph.D. 1993, Virginia Polytechnic Institute. Fields: Advance Power Systems, High Temperature Superconductivity, Network Protection, Power Quality.

+ **Balkwill, David L.,** Professor and Chair of Biomedical Sciences, College of Medicine, Ph.D. 1977, Pennsylvania State University. Fields: Microbial Ecology, Cytology, and Physiology.
Bank, Steven A., Associate Professor of Law, J.D. 1994, Chicago. Fields: Taxation, American Legal History.

+ **Banks, David C.,** Associate Professor of Computational Science, Ph.D. 1993, University of North Carolina. Fields: 3D Computer Graphics, Scientific Visualization.

Banoff, Barbara A., Professor of Law, J.D. 1973, Santa Clara School of Law. Fields: Agency/Partnership, Business Associations, Corporate Finance, Securities Regulation.

• **Barbour, Paula,** Assistant in English, Ph.D. 1975, Yale University. Fields: English Renaissance Literature, Women's Studies.

+ **Barcilon, Albert I.,** Professor of Meteorology, and Associate Director, Geophysical Fluid Dynamics Institute, Ph.D. 1965, Harvard University. Fields: Nonlinear Baroclinic Instability, Explosive Cyclogenesis.

• **Barrett, Anne E.,** Assistant Professor of Sociology, Ph.D. 1999, Duke University. Fields: Mental Health, Family, Quantitative Methodology.

+ **Barrilleaux, Charles J.,** Professor of Public Administration and Economic Policy and Government Program, Ph.D. 1985, State University of New York, Binghamton. Fields: Policy Analysis, Health Policy, American Politics.

+ **Bass, Hank**, Associate Chair and Assistant Professor of Biological Science, Ph.D. 1992, North Carolina State University. Fields: Cell and Molecular Biology; Meosis, Nucleus Organization, Cytoskeleton in Higher Plants.

+ **Bates, George W.,** Associate Chair and Professor of Biological Science, Ph.D. 1977, University of Washington at Seattle. Fields: Plant Cell and Molecular Biology, Cell Fusion, Transformation, Recombinant DNA, Plant Cell Culture.

+ **Bathke, Allen W.,** Jr., Associate Professor of Accounting, D.B.A. 1982, The Florida State University. Fields: Financial Accounting, Cost Accounting, Empirical Accounting Research, Accounting Theory.

• **Batker, Carol,** Associate Professor of English, Ph.D. Massachusetts.

+ **Baylor, Amy,** Assistant Professor of Instructional Systems and Educational Psychology, Ph.D. 1997, University of South Carolina. Fields: Cognitive Technology, Intelligent Learning Environments.

+ **Bearor, Karen A.,** Associate Professor of Art History, Ph.D., University of Texas-Austin. Fields: Modern 19th and 20th Centuries.

+ **Beaumont, Paul M.,** Associate Professor of Economics, Ph.D. 1984, University of Pennsylvania. Fields: Econometrics, Regional Economics.

+ **Beckham, Joseph C.,** Professor of Educational Leadership, Ph.D. and J.D. 1977, University of Florida. Fields: Higher Education, Educational Administration and Legal Issues.

• **Beeler, Cheryl S.,** Associate Professor of Human Services and Studies, Re.D. 1980, Indiana University. Fields: Management, Fiscal Management, Marketing.

+ **Bellenot, Steven F.,** Professor of Mathematics, Ph.D. 1974, Claremont Graduate School. Field: Functional Analysis.

• **Belton, Benjamin K.,** Assistant Professor of Information Studies, Ph.D. 1998, Emory University. Fields: Information and Globalization, History and Development of Collaborative Infrastructures for Scholarly Communication.

+ **Benesh, Gary A.,** Associate Professor of Finance, Ph.D. 1981, Virginia Polytechnic Institute and State University. Fields: Corporate Finance, Investments.

+ **Benson, Bruce L.,** Professor of Economics, Ph.D. 1978, Texas A&M University. Fields: Economic Theory, Regional Economics, Industrial Organization, Public Finance.

+ **Berg, Bernd,** Professor of Physics, Ph.D. 1977, Berlin. Fields: Theoretical Physics; Lattice Gauge Theory, Computational Physics.

+ **Berkley, Karen J.,** Professor of Psychology, Ph.D. 1968, University of Washington. Fields: Central Neural Mechanisms of Pelvic Visceral Pain, Somatosensation and Kinesthesia, Neuron-Glial Interactions, LM and EM Neuroanatomy, Electrophysiology, Biochemistry, Animal Behavior.

+ **Berry, Frances S.,** Professor of Public Administration and Policy, Ph.D., Minnesota. Fields: Intergovernmental Relations, State and Local Government, Public Policy, Strategic Management, Policy Innovation.

+ **Berry, Ralph M.,** Professor of English, Ph.D. 1985, University of Iowa. Fields: Creative Writing, Literary Theory.

+ **Berry, William D.,** Professor of Political Science, Ph.D., Minnesota. Fields: American Politics, Policy and Methodology.

+ **Bertot, John Carlo,** Associate Professor of Information Studies, Ph.D. 1996, Syracuse.

+ **Bertram, Richard,** Assistant Professor of Mathematics, Ph.D. 1993, Florida State University. Fields: Biomedical Mathematics, Dynamical Systems, Applied Mathematics.

+ **Betten, Neil B.,** Professor of History, Ph.D. 1968, University of Minnesota. Fields: United States Labor, Urban, Business.

• **Biance, Michael,** Associate in Education Administration, Ed.D. 1976, Florida Atlantic University. Fields: Educational Administration and Policy.

+ **Bickley, R. Bruce, Jr.,** Professor of English, Ph.D. 1969, Duke University. Field: Nineteenth-Century American Literature.

+ **Billings, Bruce,** Associate Professor of Accounting, Ph.D., Penn State University. Field: Financial Accounting.

• **Bish, Deborah F.,** Assistant Professor of Music, M.M. 1998, Arizona State University. Fields: Woodwind Performance and Literature.

+ **Bishop, Wendy,** Professor of English, Ph.D. 1988, Indiana University of Pennsylvania. Fields: Rhetorical Theory and Composition Studies, Creative Writing.

+ **Blaber, Michael,** Associate Professor of Chemistry, Ph.D. 1990, University of California at Irvine. Fields: Analysis of Protein Stability, Structure and Function using X-Ray Crystallography and Microcalorimetry, Analysis of Serine Protease Structure and Function.

+ **Black, Catherine,** Assistant Professor of Textiles and Consumer Sciences, Ph.D. 1993, University of Minnesota. Fields: Apparel Design, Functional and Aesthetic Apparel Design, Computer Applications in Apparel Design.

• **Blakely, George C.,** Professor of Studio Art, M.F.A. 1978, Tyler School of Art. Field: Photography.

+ **Blazek, Ronald,** Professor of Library and Information Studies, Ph.D. 1971, Illinois. Fields: User Services, Reference/Bibliography, Library History, Research Methods, Academic and School Librarianship.

+ **Blessing, Susan,** Associate Professor of Physics, Ph.D., Indiana University. Fields: Experimental Physics and Elementary Particle Physics.

+ **Blomberg, Thomas G.,** Professor of Criminology and Criminal Justice, D.Crim. 1974, University of California at Berkeley. Fields: Criminology, Victimology, Law and Social Control.

+ **Blumsack, Steven L.,** Associate Professor of Mathematics, Ph.D. 1969, Massachusetts Institute of Technology. Field: Dynamics of Rotating Fluids.

• **Bocz, George R.,** Associate Professor of Studio Art, M.Ed. 1965, Pennsylvania State University. Field: Ceramics.

+ **Boehrer, Bruce T.,** Professor of English, Ph.D. 1986, University of Pennsylvania. Fields: English Renaissance Literature, Creative Writing.

• **Boggs, H. Glenn,** II, Professor of Risk Management/Insurance and Real Estate and Program in Business Law, J.D. 1975, Florida State University. Fields: Real Estate Law and Broker/Salesman Licensure, Business Law.

+ **Bonesteel, Nicholas E.,** Professor of Physics, Ph.D. 1991, Cornell University. Fields: Condensed Matter Theory, Many Body, Magnetism, Quantum Hall Effect.

+ **Bonn, Mark A.,** Associate Professor of Hospitality, Ph.D. 1982, Texas A&M University. Fields: Tourism Marketing and Research.

+ **Boroto, Daniel R.,** Associate Professor of Psychology, Ph.D. 1972, University of Connecticut. Fields: Psychotherapy Theory and Research, Personality and Social Psychological Applications to Psychotherapy and Consultation, Applied Personality Theory.

+ **Bosselman, Robert H.,** Professor of Hospitality, Ph.D. 1985, Oklahoma State University. Field: Hospitality Adminstration.

• **Bourassa, Mark A.,** Assistant Professor of Meteorology, Ph.D. 1994, Purdue University. Fields: Remote Sensing of the Ocean Surface, Modeling of the Atmospheric and Aqueous Surface Fluxes, Applications of Air/Sea Interaction.

+ **Bourgeois, Michelle S.,** Associate Professor of Audiology and Speech Pathology, Ph.D. 1988, University of Pittsburgh. Fields: Speech-Language Pathology, Gerontology, Adult Language Disorders, Dementia.

+ **Boutin, Aimee M.C.,** Assistant Professor of Modern Languages, Ph.D. 1998, Cornell University. Field: Nineteenth-century Literature.

• **Bowens, Pamela R.,** Associate Professor of Art, M.F.A. 1980, Pratt Institute, Brooklyn, NY, and M.F.A. 1983, Tyler School of Art.

+ **Bower, Beverly L.,** Associate Professor of Higher Education, Ph.D. 1992, Florida State University. Fields: Higher Education Administration, Community College Philosophy and Leadership.

+ **Bowers, Judy K.,** Associate Professor of Music, Ph.D., Louisiana State. Fields: Music Education, Choral Music.

+ **Bowers, Philip L.,** Associate Chair and Professor of Mathematics, Ph.D. 1983, University of Tennessee. Fields: Geometric Topology, Geometry.

• **Bowman, Cynthia,** Assistant Professor of English Education, Ph.D. 1996, Kent State University. Fields: Literacy, Technology, At-Risk Adolescents, Qualitative Research, Community.

+ **Bowman, James S.,** Professor of Public Administration and MPA Director, Ph.D. 1973, University of Nebraska. Fields: Human Resource Administration, Professional Ethics, Japanese Management.

• **Bradley, Robert,** Professor of Public Administration and Policy, Ph.D. 1977, University of Florida. Fields: Public Policy, Budgeting, Intergovernmental Relations, Research Methods, Science and Technology Policy.

+ **Branson, Robert K.,** Professor of Educational Research and Director, Center for Performance Technology, Ph.D. 1959, Ohio State University. Fields: Instructional Systems Design and Implementation, Job Analysis, Computer-Based Instruction, Video-disc Technology.

+ **Braswell, Robert N.,** Professor of Industrical Engineering, Ph.D. 1964, Oklahoma State University. Fields: Supercomputer Architectures, Large-scale Scientific Computing, Robotics, Artificial Intelligence.

+ **Brewer, Charles E.,** Associate Professor of Music, Ph.D., City University of New York. Field: Musicology/Music Literature.

+ **Brewer, James K.,** Professor of Educational Research, Ph.D. 1965, The Florida State University. Field: Statistical Applications to Education, especially Non-Parametric Methods.

+ **Brewster, Karin,** Associate Professor of Sociology, Ph.D., University of Washington. Fields: Population, Family, Social Stratification.

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+ **Brigham, John Carl,** Professor of Psychology, Ph.D. 1969, University of Colorado. Fields: Social Psychology, Psychology and Law, Factors Affecting Accuracy of Eyewitness Identifications, Social Influence Processes.

+ **Brooks, Frank B.,** Associate Professor of Curriculum and Instruction, Ph.D., Ohio State. Fields: Multilingual/Multicultural Education.

+ **Brooks, James,** Professor of Physics, Ph.D. 1973, University of Oregon. Fields: Condensed Matter Experiment, Low Temperature, High Magnetic Field Phenomena, Organic Conductors.

+ **Brower, Ralph**, Associate Professor of Public Adminstration, Ph.D. 1995, University of Albany-State University of New York. Fields: Organizational Behavior and Theory, Research Methods.

+ **Brown, Carol Lynch,** Professor of Educational Theory and Practice, Ph.D. 1971, Ohio State University. Fields: Children's Literature, International Literature, Language and Literacy Education.

+ **Brown, Stewart L.,** Professor of Finance, Ph.D. 1974, University of Florida. Fields: Financial Institutions, Markets, Investments.

• **Brusco, Michael J.,** Associate Professor of Marketing, Ph.D. 1990, Florida State University. Fields: Workforce Scheduling, Optimal and Heuristic Solutions Methods.

+ **Bryant, John L.,** Professor of Mathematics, Ph.D. 1965, University of Georgia. Fields: Geometric Topology, Application of Topology to Chemistry.

+ **Brymer, Robert A.,** Professor of Hospitality, Ph.D., University of Denver. Fields: Hospitality Industry.

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• **Burggraf, Ray L.,** Professor of Studio Art, M.F.A. 1970, University of California at Berkeley. Field: Painting.

+ **Burke, Helen M.,** Associate Professor of English, Ph.D., Southern Mississippi. Fields: Eighteenth-Century British and Irish Literature, Literary Theory.

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+ **Burkes, Shannon**, Assistant Professor of Religion, Ph.D. 1997, University of Chicago. Fields: Hebrew Bible, Second Temple Judaism, Ancient Egypt.

+ **Burkhead, E. Jane,** Associate Professor of Human Services and Studies, Ph.D. 1980, University of Missouri. Fields: Career Development of Disabled Persons, Psychosocial Aspects of Disability, Wellness Programming.

+ **Burmester, Michael,** Visiting Professor of Computer Science, Ph.D. 1966, University of Rome. Fields: Cryptography, Computer Security, Network Security, Discrete Mathematics.

+ **Burnett, Gary**, Assistant Professor of Information Studies, Ph.D. 1988, Princeton University. Fields: Analysis, Information Graphics, Learning Resources, and Web Development.

+ **Burnett, Kathleen**, Associate Professor of Information Studies, Ph.D. 1989, University of California-Berkeley. Fields: Organization of Information, Information Technology, Information Design, Rare Books and Art Librarianship.

+ **Burnett, William C.,** Professor of Oceanography, Ph.D. 1974, University of Hawaii. Fields: Application of Naturally-Occurring Uranium and Thorium Decay-Series Isotopes to Marine Geochemical Problems, Study of the Distribution, Origin, and Geochemistry of Offshore Minerals.

- **Bush, Ashley A.,** Assistant Professor of Management Information Systems, Ph.D. 2002, Georgia State University. Fields: E-business Strategy, Supply Chain Management, IS Strategy.
- **Butler, David M.,** Chair and Associate Professor of Interior Design, M.A. 1978, University of Missouri. Fields: Lighting Design, Business Principles, Practices and Licensure.
+ **Butler, Robert Olen,** Francis Eppes Professor of English, M.A. 1969, University of Iowa. Fields: Creative Writing (fiction and screenplays).
+ **Buzyna, George,** Professor of Mechanical Engineering, Ph.D. 1967, Yale University. Fields: Gas Dynamics, Geophysical Fluid Dynamics.
- **Byrnes, William J.,** Associate Dean for Production and Professor of Theatre, M.F.A., University of California at Los Angeles. Fields: Theatre Management, Computers for Design and Management, Lighting Design.
- **Callender, Clifton,** Assistant Professor of Music Theory and Composition, Ph.D. 2002, Florida State University. Fields: Music Theory.
- **Canache, Damarys**, Assistant Professor of Political Science, Ph.D. 1999, University of Pittsburgh. Fields: Comparitive Politics, especially Latin America, Mass Political Behavior, Public Opinion.
+ **Canterbery, E. Ray,** Professor of Economics, Ph.D. 1966, Washington University. Fields: International Finance, Monetary Theory, Public Policy, International Economics, Economic Development, Welfare Economics.
+ **Cao, Jianming,** Assistant Professor of Physics, Ph.D. 1996, University of Rochester. Fields: Experimental Physics, Condensed Matter, Femtosecond Ultrafast Dynamics.
+ **Capps, William Marvin,** Professor of Music, D.M.A. 1970, Catholic University. Fields: Horn Performance, Brass Literature.
+ **Cappuccio, Brenda Logan,** Associate Chair and Associate Professor of Modern Languages and Linguistics, M.S. 1989, University of Kentucky. Fields: Hispanic Poetry, Contemporary Peninsular Literature.
+ **Capstick, Simon**, Associate Professor of Physics, Ph.D. 1986, Toronto. Fields: Theoretical Nuclear and Particle Physics.
+ **Carbonell, Joyce L.,** Professor of Psychology, Ph.D. 1978, Bowling Green State University. Fields: Sex Roles and Leadership, Prediction of Career Criminal Behavior, Classification Systems for Prison Inmates, Sex Roles and Depression.
+ **Carlson, Elwood,** Visiting Professor of Sociology, Ph.D. 1978, University of California at Berkeley. Fields: Demography, Family, Political Economy.
+ **Carrabino, Victor,** Professor of Modern Languages and Linguistics, and Director, Study Abroad Programs, Ph.D. 1970, University of Massachusetts at Amherst. Fields: 20th-Century French Literature and Black Literature of French Expression.
+ **Carroll, Pamela S.,** Professor of Curriculum and Instruction, Ed.D., Auburn. Fields: English Education.
+ **Carsey, Thomas,** Associate Professor of Political Science, Ph.D. 1995, Indiana University. Fields: American Politics (Elections and mass behavior, political parties, state and local parties, and Congress), Research Methods.
- **Carson, James M.,** Professor of Management, Ph.D. 1993, University of Georgia. Fields: Mortality-contingent Product and Cost Issues, Empirical Analyses of Insurer Solvency, and Insurance Applications of Agency Theory.
+ **Cartes, David A.**, Assistant Professor of Mechanical Engineering, Ph.D., Dartmouth College.
+ **Casanovas, Joan,** Visiting Assitant Professor of History, Ph.D. 1994, University of New York at Stony Brook. Fields: Cuba, Spain, Latin America.
+ **Case, Bettye Anne,** Professor of Mathematics, Ph.D. 1969, University of Alabama. Fields: Univalent and Quasi-analytic Functions, Teaching of College Mathematics.
+ **Caspar, Donald L.**, Professor of Biological Science, Ph.D. 1955, Yale. Fields: Structural Biology: Protein Adaptability and Virus Particle Assembly studied by X-Ray and Electron Crystallography, Diffuse Scattering, Electron Cryomicroscopy and Physiochemical Methods.
+ **Celec, Stephen E.,** Professor of Finance and Director of College Doctoral Program, Ph.D. 1976, University of North Carolina at Chapel Hill. Fields: Corporate Finance.
+ **Chackerian, Richard,** Professor of Public Administration, Ph.D. 1969, University of Washington. Fields: Comparative Administration, Organization Theory, Privatization, Bureaucracy and Society.
+ **Chandrasekaran, Namasivayam,** Professor of Mechanical Engineering, Ph.D., Texas A&M Unversity. Fields: Finite-Element Methods, Solid Mechanics, Superplastic Metal Forming, Materials and Plasticity.
+ **Chanton, Jeffrey Paul,** Professor of Oceanography, Ph.D. 1985, University of North Carolina at Chapel Hill. Fields: Coastal Processes Involving Cycling of Major Elements, Carbon, Sulfur, Oxygen, Nitrogen, and Iron; Fluxes of Gases from Wetland Soils.
- **Chapin, Timothy**, Assistant Professor of Urban and Regional Planning, Ph.D. 1999, University of Washington, Seattle. Fields: Geographic Information Systems, Planning Methods, Infrastructure, Economic Development, Urban Revitalization.
+ **Chapman, Michael,** Associate Professor of Chemistry, Ph.D., University of California. Fields: Structural Determination of Viral Proteins Using X-ray Crystallography.
+ **Chapo, Eliot,** Professor of Music, Artist Diploma 1967, Curtis Institute of Music. Fields: Violin Performance, String Literature.
- **Chappell, Fred D.,** Professor of Theatre, B.A., Rollins College. Fields: Acting and Directing.
+ **Charness, Neil,** Professor of Psychology, Ph.D., Carnegie-Mellon University Fields: Cognitive and Behavioral Science; Expertise/Skill Acquisition and Aging (chess, bridge, word processing, mental calculation); Age and Human Factors (computer interfaces and training, legibility, driving, computer-based cognitive assessment).
+ **Chase, P. Bryant,** Associate Professor of Biological Science, Ph.D. 1984, University of Southern California at Los Angeles. Fields: Biomechanics of Cardiac and Skeletal Muscle, Bionanotechnology.
+ **Chella, Ravindran,** Associate Professor of Chemical Engineering, Ph.D. 1984, University of Massachusetts at Amherst. Fields: Polymer Mixing, Composites and Blends, Reactive Mixing.
+ **Chen, Ching-jen,** Dean of the College of Engineering and Professor of Mechanical Engineering, Ph.D., Case Western Research University. Fields: Heat Transfer and Computational Fluid Mechanics.
- **Cheng, Yingmei,** Assistant Professor of Finance, Ph.D. 2001, University of Pennsylvania. Fields: Capital Markets, Market Efficiency, Mergers and Acquisitions, Security Analysis.
- **Childs, Matthew D.,** Assistant Professor of History, Ph.D. 2001, University of Texas at Austin. Fields: Latin America, Caribbean.
+ **Chin, Wei-Chun,** Visiting Assistant Professor of Chemical Engineering, Ph.D. 2000, University of Washington at Seattle. Fields: Cellular Signaling, Cellular Engineering, Polymer Gel Assembly, Biopolymer Gel.
+ **Chiricos, Theodore G.,** Professor of Criminology, Ph.D. 1968, University of Massachusetts. Fields: Criminology, Criminological and Sociological Theory.
+ **Christiansen, William A.,** Associate Professor of Finance, Ph.D. 1989, University of Utah. Field: Financial Institutions and Markets.

  Christie, Donna R., Professor of Law, J.D. 1978, University of Georgia College of Law. Fields: Environmental Law, Ocean and Coastal Law, Land Use Regulation.
- **Chudoba, Katherine M**., Assistant Professor of Management Information Systems, Ph.D. 1993, University of Arizona. Fields: Organizational Impacts of Groupware Technologies.
+ **Ciannella, Yvonne,** Professor of Music, B.A. 1946, Queens College. Fields: Voice Performance, Voice Literature.
+ **Cioslowski, Jerzy,** Professor of Chemistry, and Scholar/Scientist, Supercomputer Computations Research Institute, Ph.D. 1987, Georgetown. Fields: Ab Initio Electronic Structure Calculations, Density Functional Theory, Properties of Atoms in Molecules.
+ **Claggett, William,** Associate Professor of Political Science, Ph.D. 1978, University of Minnesota. Fields: Statistical Analysis, Electoral Behavior, Political Parties.
- **Clark, Jack,** Associate in Dance, Dance, M.F.A. 1984, Florida State University. Fields: Choreography, Labanotation and Reconstruction.
+ **Clark, Jeffrey A.,** Professor of Finance, Ph.D. 1980, University of Illinois. Field: Financial Institutions and Markets.
- **Clark, Robert C.,** Associate Professor of Educational Theory and Practice, and Associate Dean, College of Education, Ed.D. 1974, University of Tennessee at Knoxville. Fields: Mathematics Education, Computer Education.
+ **Clark, Ronald J.,** Professor of Chemistry, Ph.D. 1958, Kansas. Fields: Synthesis and Characterization of Superconducting Materials, Ceramics, Metal Carbonyl Trifluorophosphine Chemistry.
+ **Clarke, Allan J.,** Professor of Oceanography, Ph.D. 1976, Cambridge University. Fields: Wind-Driven Current and Sea-Level Fluctuations on Continental Shelves, Equatorial Ocean Dynamics, Short-Term Climate Fluctuations, Antarctic Circumpolar Current, Dynamics of Tides on Continental Shelves and in Straits.
+ **Clarke, Karen E.,** Professor of Music, M.M. 1966, Peabody Institute. Fields: Violin Performance, String Literature.

  Clarke, Trent Reed, Assistant Professor of Biomedical Sciences, Medicine, Ph.D. 1995, University of Michigan. Field: Biological Chemistry.
- **Clayson, Carol Anne**, Associate Professor of Meteorology and Program Director, Ph.D. 1995, University of Colorado. Fields: Atmosphere/Ocean Interaction, Boundary Layer Processes.
+ **Clement, Annie**, Associate Professor of Sport Administration, Ph.D. 1966, University of Iowa, and J.D. 1983, Cleveland State University. Fields: Sport Management, Sport Law.
+ **Clendinning, Jane Piper,** Associate Professor of Music, Ph.D., Yale. Field: Music Theory.
+ **Cloonan, William,** Professor of Modern Languages and Linguistics, Ph.D. 1970, University of North Carolina at Chapel Hill. Fields: Seventeenth Century French Literature, the European Novel in the Twentieth Century, Comparative Literature.
- **Close, Billy Ray**, Assistant Professor, Ph.D. 1997, Florida State University. Fields: Minorities, Crime and Social Policy, Ethnicity and Methodology in the Humanities and Social Sciences.
+ **Cloud, Rinn M.,** Margaret A. Sitton Professor and Chair of Textiles and Consumer, Ph.D. 1978, North Carolina at Greensboro. Fields: Physical/Mechanical Properties of Textiles, Barrier Effectiveness of Protective Clothing Fabrics, Comfort and Health Effects of Textile Products.
+ **Coats, Pamela K.,** Professor of Finance, Ph.D. 1978, University of Nebraska at Lincoln. Fields: Corporate Finance, Financial Modeling.
+ **Cobbe, James H.,** Chair and Professor of Economics, Ph.D. 1977, Yale University. Fields: Economic Development, International Economics, Labor Economics, Comparative Systems.
+ **Cockburn, Juan C.,** Associate Professor of Electrical and Computer Engineering, Ph.D. 1994, Minnesota. Fields: Control Systems and Robotics.
- **Coleman, Robert H.,** Assistant Professor of Theatre, M.F.A. 1998, Yale School of Drama. Field: Technical Direction.
+ **Collins, Emmanuel,** Associate Professor of Mechanical Engineering, Ph.D. 1987, Purdue. Fields: Controls and Dynamics.
- **Combs, James G.,** Assistant Professor of Management, Ph.D. 1995, Louisiana State University. Fields: Antecedents and Consequences of Franchising, Executive Compensation, Corporate Governance.
+ **Conner, Valerie Jean,** Associate Professor and Associate Chair of History, Ph.D. 1974, University of Virginia. Fields: United States, Progressive Era, Gilded Age.
+ **Connerly, Charles E.,** Chair and Professor of Urban and Regional Planning, Ph.D. 1980, University of Michigan. Fields: Housing and Community Development, Neighborhood Theory, Economic Development, Policy Analysis.
+ **Contreras, Robert J.,** Professor of Psychology and Program Director, Ph.D., Michigan State; Fields: Neural and Hormonal Substrates of Behavior, Appetite, Obesity, and Hypertension, Behavioral and Neural Studies of Taste.
+ **Cook, Laura R.,** Associate Professor of Nutrition, Food, and Exercise Science, Ph.D. 1979, Iowa State. Fields: Food Science and Human Nutrition.
- **Cooper, Mark G.,** Assistant Professor of English, Ph.D. 1998, Brown University. Fields: U.S. Cinema, Visual Cultural Studies, Feminism, 20th Century U.S. Culture and Political Economy.
+ **Cooper, William T., III,** Associate Professor of Chemistry, Ph.D. 1981, Indiana University. Fields: Chromatography, Environmental Biogeochemistry of Organic Compounds in Natural Waters, Surface Chemistry on Minerals, Marine Organic Geochemistry.
+ **Corbett, Richard B.,** Professor of Risk Management/Insurance, Ph.D. 1974, Georgia State University. Fields: Property and Liability Insurance, Risk Management, Insurance Coverages.
+ **Cornille, Thomas A.,** Associate Professor of Family and Child Sciences, Ph.D. 1981, The Florida State University. Fields: Addictions, Social Support.
+ **Corrigan, John,** Professor of Religion, Ph.D. 1982, University of Chicago. Fields: American Religious History, Religion and Emotion, Theory and Method in the Academic Study of Religion.
+ **Corzine, Michael L.,** Professor of Music, D.M.A. 1979, Eastman School of Music. Fields: Organ Performance, Keyboard Literature.
+ **Cottle, Paul D.,** Director, Honors Program, and Professor of Physics, Ph.D. 1986, Yale University. Fields: Experimental Physics, Heavy-Ion Nuclear Physics.
- **Cottrell, Barbara H.,** Associate Professor of Nursing, M.S.N., University of Florida. Fields: Maternity Nursing, Birth, Women and Infants Health.
+ **Coursey, David,** Associate Professor of Public Administration and Policy, Ph.D., Syracuse. Fields: Management Information Systems, Research Methods, Science and Technology Policy, Public Management.
+ **Cowart, James B.,** Professor of Geological Sciences, Ph.D. 1974, The Florida State University. Fields: Isotope Geochemistry, Hydrology, Geochronology.
+ **Cowart, Marie E.,** Dean, College of Social Sciences and Professor of Urban and Regional Planning, and Research Associate, Institute on Aging, DPH 1982, Columbia University. Fields: Health Planning and Policy, Health Care Administration, Gerontology.

+ **Cradit, J. Dennis,** Chair and Professor of Marketing, Ph.D. 1984, University of Iowa. Fields: Philosophy of Science, Methodology, Consumer Behavior.
• **Creswell, Michael,** Assistant Professor of History, Ph.D. 1997, University of Chicago. Fields: Contemporary Europe (France Emphasis), International Politics, Cold War History, Military Affairs.
+ **Crew, Robert E., Jr.,** Professor of Public Administration, and Associate Dean, College of Social Sciences, Ph.D. 1970, University of North Carolina. Fields: Public Management, Public Policy, Program Evaluation and Criminal Justice Policy.
• **Crisp, Thomas**, Assistant Professor of Philosophy, Ph.D. 2002, University of Notre Dame. Fields: Metaphysics, Epistemology.
+ **Croft, James E.,** Professor of Music, D.M.E. 1970, University of Oklahoma. Fields: Wind Literature, Bands, Music Education.
+ **Cronin, J. Joseph, Jr.,** Professor of Marketing, Ph.D. 1981, Ohio State University. Fields: Marketing Strategy, Service Marketing, Retail Marketing.
+ **Crook, Eugene J.,** Professor of English, Ph.D. 1970, University of Illinois. Fields: Medieval Literature, Linguistics, Contemporary British Literature.
+ **Crook, Wendy,** Associate Professor of Social Work, Ph.D. 1996, Rutgers University. Fields: Organizational Theory, Administrative Practice, Policy Analysis, Program Evaluation, Homelessness, Disabilities and Family Violence.
+ **Cross, Timothy A.**, Professor of Chemistry, Ph.D. 1981, University of Pennsylvania. Fields: Structure and Dynamics of Gramicidin A in a Lipid Bilayer of Solid-State N15 and H1 Nuclear Magnetic Resonance.

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+ **Crow, Jack E.,** Professor of Physics, and Director, National High Magnetic Field Laboratory, Ph.D., University of Rochester. Field: Experimental Condensed Matter Physics.
• **Crowley, Donna J.,** Associate Professor of Communication Disorders, M.A. 1968, University of Florida. Fields: Language for the Hearing Impaired, Language Disorders, Computerized Instruction.
• **Cuevas, Bryan J.,** Assistant Professor Religion, Ph.D. 2000, University of Virginia. Fields: Asian Religious Traditions, Tibetan and Himalayan Buddhism.
+ **Cunningham, Philip,** Visiting Assistant Professor of Meteorology, Ph.D. 2000, University of Albany. Fields: Dynamic and Synoptic Meteorology, Geophysical Fluid Dynamics.
+ **Currie, Elliot,** Visiting Professor of Criminology, Ph.D. 1973, University of California at Berkeley. Fields: Crime, Drug Abuse, Delinquency and Social Policy.
+ **Dagotto, Elbio,** Professor of Physics, Ph.D., Instituto Balseiro, Argentina. Fields: Theoretical Physics, Condensed Matter, Particle Physics
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+ **Dahms, Harry**, Associate Professor of Sociology, Ph.D., New School for Social Research. Fields: Theory, Economic Sociology, Political Sociology.
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+ **Dalton, Jon C.,** Associate Professor of Educational Leadership, Ed.D. 1975, University of Kentucky. Field: Higher Education Administration.
+ **Dalton, Peter C.,** Associate Professor of Philosophy, Ph.D. 1972, University of Rochester. Fields: Modern Philosophy (1600-1900), Ethics, Metaphysics, Metaphilosophy.
+ **Dancy, Russell M.,** Chair and Professor of Philosophy, Ph.D. 1966, Harvard University. Fields: Ancient Greek Philosophy, Philosophy of Language, Metaphysics, Philosophy of Science.
• **Darabi, Abbas,** Assistant Professor of Instructional Systems, Ph.D. 1981, Florida State University. Fields: Program Evaluation, Systems Theory, Performance Improvement, Performance Technology.
+ **Darling, Carol Anderson,** Professor of Family and Child Sciences, Ph.D. 1979, Michigan State University. Distinguished Teaching Professor, 1996-1997. Fields: Human Sexuality, Parent-Child Interaction, Family Crises, Work and the Family.
+ **Darst, David H.,** Professor of Modern Languages and Linguistics, Ph.D. 1970, University of Kentucky. Fields: Spanish Golden Age Literature, Renaissance and Baroque Humanities.
• **Davis, Frederick R.,** Assistant Professor of History, Ph.D. 2001, Yale University. Fields: U.S. Science, Environmental History.
• **Davis, Lynda J.,** Professor of Dance, M.F.A. 1971, California Institute of the Arts. Fields: Contemporary Dance Technique, Contemporary Dance Repertory, Choreography.
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+ **Davis, Nancy T.,** Associate Professor of Curriculum and Instruction, Ph.D., University of Georgia. Fields: Science Education.
• **Dean, Patricia R.,** Associate Professor of Nursing, M.S.N. 1976, Medical College of Georgia. Fields: Psychiatric Nursing, Substance Abuse.
+ **Degen, John A.,** Associate Professor of Theatre, Ph.D. 1977, Indiana University. Field: Theatre History and Criticism.
+ **de Grummond, Nancy T.,** Professor of Classics and Director, Excavations at Cetamura, Ph.D. 1968, University of North Carolina at Chapel Hill. Fields: Classical Archaeology and Etruscology.
+ **DeHaven-Smith, Lance M.,** Professor of Public Administration and Policy and Director, Florida Institute of Government, Ph.D. 1980, Ohio State. Fields: Public Policy, Political Theory.
+ **Delp, Roy E.,** Professor of Music, M.M. 1967, New England Conservatory. Fields: Voice Performance, Voice Literature.
+ **Delva, Jorge,** Visiting Scholar/Scientist/Engineer of Social Sciences, Ph.D. 1996, University of Hawaii. Fields: Substance Use and Dependence, Mental health, Drug Epidemiology, Survey Research Program Evaluation, Statistics, International and Cross-Cultural Research.
+ **Dennis, Lawrence C.,** Associate Vice President for Academic Affairs, Director, Distance and Distributed Learning and Professor of Physics, Ph.D. 1979, University of Virginia. Fields: Experimental Physics; Heavy-Ion Nuclear Physics, Electron Scattering.
+ **Desmedt, Yvo G.**, Professor of Computer Science, Ph.D. 1984, Katholieke University. Fields: Computer Security, Cryptography, Fault-Tolerant Computation, Information Hiding, Network Security, Watermarking.
+ **Dewar, William K.,** Professor of Oceanography, and Faculty Associate, Supercomputer Computations Research Institute, Ph.D. 1983, Massachusetts Institute of Technology-Woods Hole Oceanographic Institution Joint Program in Oceanography. Fields: General Ocean Circulation, Gulf Stream Rings and Coherent Structures, Western Boundary Currents, Mixing, Turbulent Diffusion, and Transport Processes, Forced and Free Mesoscale Systems, Mixed Layer Dynamics.
+ **Deyle, Robert E.,** Associate Professor of Urban and Regional Planning, Ph.D. 1987, State University of New York at Syracuse. Fields: Environmental Policy Analysis and Planning, Solid and Hazardous Waste Management, Coastal Planning, Water Resources Management.
• **Dickey, Michael H.,** Assistant Professor of Management Information Systems, Ph.D. 2001, Louisiana State University. Fields: Virtual Organizations, Business-to-Business Electronic Commerce, Technology in Franchise Organizations.
+ **Dickson-Carr, Darryl,** Associate Professor of English, Ph.D. 1995, University of California. Fields: African American Literature, Twentieth-Century American Literature, African American Satire, Literary Theory.
+ **Diskin, Barry A.,** Professor of Risk Management/Insurance and Real Estate, Ph.D. 1982, Georgia State University. Fields: Real Estate Valuation, Computer Applications to Real Estate, Valuation Analysis.
+ **Doan, Peter L.**, Associate Professor of Urban and Regional Planning, and Faculty Associate, Center for the Study of Population, Ph.D. 1988, Cornell University. Fields: Planning for Underdeveloped and Developing Regions, Regional Economic Development, Rural Development.
+ **Dobrosavljevic, Vladimir**, Associate Professor of Physics, Ph.D. 1988, Brown University. Fields: Condensed Matter Theory, Disordered Systems and Glasses, Metal-insulator Transition.

Dodge, Joseph M., III, Weaver, Miller, Weissler, Alhadeff and Sitterson Professor of Law, LL.B. 1967, Harvard, LL.M. 1973, New York University. Fields: Federal Income Taxation, Estate and Gift Taxation, Donative Transfers, International Tax, Tax Policy.
+ **Doerner, William G.**, Professor of Criminology and Criminal Justice, Ph.D. 1977, University of Tennessee. Fields: Ecology of Crime, Juvenile Delinquency, Law Enforcement and Victimology.
+ **Donoghue, Joseph F.,** Associate Professor of Geological Sciences, Ph.D. 1981, University of Southern California. Fields: Sedimentology, Holocene Marine Stratigraphy, Marine Geology.
+ **Doran, Glen H.,** Professor of Anthropology, Ph.D. 1980, University of California at Davis. Fields: North American Prehistory, Archaeological Method and Theory, Paleodemography, Human Osteology.
+ **Dorn, Charles M.,** Professor of Art Education, Ed.D. 1959, University of Texas. Field: Curriculum and Instruction.
+ **Dorsey, Jodee L.,** Associate Professor of Nutrition, Food, and Exercise Science, Ph.D. 1976, University of Tennessee. Fields: Metabolic Aspects of Obesity, Nutrient/Drug Interaction.
+ **Dorsey, John G.**, Professor of Chemistry, Ph.D. 1979, Cincinnati. Fields: Analytical Separations, Especially Liquid Chromatography and Capillary Electrophoresis, Theory, Retention Processes, Quantitative Structure-retention Relationships, Physiochemical Mearsurements, Analystical Applications of Organized Media.
+ **Dougherty, Ralph C.**, Professor of Chemistry, Ph.D. 1963, Chicago. Fields: Immunoassay and Mass Spectrometry Applied to Problems in Human and Environmental Health, Absolute Asymmetric Synthesis.
• **Douglas, Ceasar,** Assistant Professor of Manangement, Ph.D. 1997, University of Mississippi. Fields: Leadership, Leader Political Behavior, Work Team Development, Temporary Workforce Issues.
+ **Douglas, Ian William**, Assistant Professor of Computer Science, Ph.D. 1996, Glasgow Caledonian University. Fields: Human-computer interaction; computer-based learning; graphical user interfaces.
• **Downs, Phillip E.,** Professor of Marketing, Ph.D. 1976, University of North Carolina. Fields: Research Design, Marketing Research, Marketing Strategy.
• **Draper, Jerry L.,** Dean Emeritus, Visual Arts and Dance, and Associate Professor of Art History, Ph.D. 1973, University of North Carolina. Fields: Renaissance and Nineteenth Century Art.
+ **Dresang, Eliza**, Associate Professor of Information Studies, Ph.D. 1981, University of Wisconsin-Madison. Fields: Information Seeking Behavior, Multimedia Information Systems, Telecommunications, School Library Media, Resources for Children and Young Adults.
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• **Dunn, Julia K.**, Associate Professor of Human Services and Studies, Ph.D., University of Illinois. Fields: Leisure Services and Studies.
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• **Durtschi, Cindy**, Assistant Professor of Accounting, Ph.D. 1998, University of Arizona. Fields: Pension Choice, Institutional Trades Around Earnings Announcement Dates, Lease-type Choice for Firms in Financial Distress.
+ **Dusenbury, Richard B.**, Associate Professor of Accounting, Ph.D., University of Wisconsin-Madison and University of Florida. Fields: Taxation, Behavioral Accounting Research.
+ **Dzurik, Andrew A.,** Professor of Civil and Environmental Engineering, Ph.D. 1969, Cornell University. Fields: Water Resources Planning and Management, Environmental Systems Analysis.
+ **Eastman, Kevin,** Professor of Risk Management and Insurance, Ph.D., University of Pennsylvania. Fields: Risk and Insurance.
+ **Easton, Dexter M.,** Service Professor of Biological Science, Ph.D. 1947, Harvard University. Field: Biophysics of Nerve-Impulse Propagation.
+ **Easton, Peter A.,** Associate Professor of Educational Foundations and Policy Studies, Ph.D. 1988, The Florida State University. Fields: Comparative Adult Education, Human Resource Economics, Evaluation and Planning Methodology, Community Education and Cooperatives; Africa and the Caribbean.
• **Ebbers, Paul D.,** Associate Professor of Music, M.M. 1971, Northwestern University. Fields: Tuba Performance, Euphonium Performance, Brass Literature.
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+ **Edmondson, Laura**, Assistant Professor of Theatre, Ph.D. 1999, University of Texas at Austin. Fields: African Theatre, Postcolonial and Feminist Theory, European Theatre History, and Playwriting.
+ **Edwards, Barbara J.,** Associate Professor of Special Education, Ed.D. 1989, University of Kentucky. Fields: Special Education Technology, the Mildly Handicapped.
• **Edwards, Leigh H.,** Assistant Professor of English, Ph.D. 1999, University of Pennsylvania. Fields: 19th Century U.S. Literature and Culture, American Studies and Cultural Studies, Critical Theories of Race and Gender, Popular Culture.
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+ **Ellingson, Robert G.,** Professor and Chair of Meteorology, Ph.D. 1972, Florida State University. Fields: Physical Meteorology-Thermodynamics, Cloud Physics, Radiative Transfer.
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• **Epstein, Andrew D.,** Assistant Professor of English, Ph.D. 2000, Columbia University. Fields: 20th Century American Literature especially post-1945, Modern and Contemporary Poetry and Poetics, Modernism/Postmodernism, the Avant-Garde.
+ **Epstein, Lloyd M.,** Associate Professor of Biological Science, Ph.D. 1983, Indiana State University. Fields: Eukaryotic Molecular Genetics, Autocatalytic Processing of RNA, Genome Organization and Evolution, Environmental Modulated Gene Expression.
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+ **Erndl, Kathleen M.**, Associate Professor of Religion, Ph.D. 1987, Wisconsin. Fields: Modern Hinduism, Hindu Goddess Traditions and Womens Roles, Theory and Method in the Study of Religion, Women and Religion.
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+ **Faught, Michael**, Assistant Profesor of Anthropology, Ph.D. 1996, University of Arizona, Tuscon. Fields: Paleoindian Archaeology, North American Archaeology and Culture History, Chipped Stone Studies, Geoarchaeology, Public Archaeology.
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+ **Fernandez, Roberto G.,** Professor of Modern Languages and Linguistics, Ph.D. 1977, Florida State University. Fields: Latin American Literature and Creative Writing.
+ **Ferris, Gerald R.**, Frances Eppes Professor of Management and Professor of Psychology, Ph.D. 1982, University of Illinois at Urbana-Champaign. Fields: Human Resources Management and Organizational Behavior.
• **Fichter, Robert W.,** Professor of Studio Art, M.F.A. 1967, Indiana University. Field: Photography.
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+ **Fiorito, Susan S.,** Associate Professor of Clothing, Textiles, and Merchandising, Ph.D., Oklahoma State University. Fields: Apparel Retail Technologies and Merchandising.
+ **Fisher, Douglas L.,** Associate Professor of Music, M.M., Florida State University. Fields: Opera Coaching/Accompanying.
+ **Fisk, Zachary,** Professor of Physics, Ph.D. 1969, University of California-San Diego. Fields: Condensed Matter Experiment, Superconductivity, Magnetism, Heavy Fermions.
+ **Flake, Janice L.,** Professor of Educational Theory and Practice, Ph.D. 1973, University of Illinois. Fields: Mathematics Education, Computer Education, Computers in Mathematics Education, Computer Graphics, Computer Simulation, Integrating Computers into Curriculum, Visualization and Imagery Development, Teacher Education.
+ **Flanagan, Scott C.,** Professor of Political Science Ph.D. 1972, Stanford University. Fields: Comparative Politics, Mass Political Behavior, Elections and Voting Behavior, Political Culture and Value Change, Japanese Politics, Cross-National Comparisons among Advanced Industrial Societies.
• **Fleming, Raymond R.,** Professor of Modern Language, Ph.D. 1976, Harvard. Fields: Italian Trecento, European Romanticism, African American Studies.
+ **Fletcher, Donna Newcomer,** Associate Professor of Human Services and Studies, Ph.D. 1975, The Florida State University. Fields: Special Education, Leisure Services.
+ **Flynn, Lisa R.,** Associate Professor of Marketing, Ph.D., Alabama. Fields: Retail and Psychometrics.
+ **Foo, Simon**, Associate Professor of Electrical and Computer Engineering, Ph.D. 1988, University of South Carolina. Fields: VLSI CAD, Analog IC Design, Artificial Intelligence (especially Artificial Neural Systems), Database Systems, Parallel Processing.
• **Ford, W. Scott,** Associate Professor of Sociology, Ph.D., University of Kentucky. Fields: Race and Ethnic Relations, Urban Community.
• **Ford-Kronholz, Barbara J.,** Associate Professor of Music, M.M. 1971, University of Michigan. Field: Vocal Performance.
• **Foreman, Frederick J.**, Assistant Professor of Mechanical Engineering and Director of Minority Programs, Ph.D. 1995, Florida A&M University. Fields: Theoretical and Applied Mehcanical.
+ **Fortenberry, Norman L.,** Associate Director and Assistant Professor of Mechanical Engineering, Ph.D., Massachusetts Institute of Technology. Fields: Applied Mechanics and Design, Materials.
+ **Foulk, David F.,** Chair and Professor of Curriculum and Instruction, Ed.D. 1978, University of Tennessee. Fields: Health Behaviors of At-Risk Youth, HIV/AIDS Prevention Among Migrant Farm-Workers.
+ **Fournier, Gary M.,** Professor of Economics, Ph.D. 1981, University of Virginia. Fields: Industrial Organization, Regulation.
+ **Fowler, Douglas R.,** Professor of English, Ph.D. 1972, Cornell University. Fields: Twentieth-Century British and American Literature.
+ **Fowler, Nancy Carolyn,** Professor of Music, Ph.D. 1971, Ohio State University. Fields: Oboe Performance, Woodwind Literature.
• **Frank, Deborah I.,** Professor of Nursing and Graduate Program Coordinator, Ph.D. 1982, The Florida State University. Fields: Psych/Mental Health Nursing, Marriage and Family Therapy, Sex Therapy and Education.
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+ **Freiberg, Jack W.,** Associate Professor of Art History, Ph.D., Institute of Fine Art-New York University. Field: Italian Renaissance.
• **Freiden, Jon B.,** Associate Professor of Marketing, Ph.D. 1977, University of Oklahoma. Fields: Promotion, Consumer Behavior, Product Management.
• **Freidman, Max Paul,** Visiting Assistant Professor of History, Ph.D. 2000, University of California at Berkeley. Field: U.S. Foreign Relations.
+ **Fuelberg, Henry E.,** Professor of Meteorology, Ph.D. 1976, Texas A&M University. Fields: Synoptic and Mesometeorology, Remote Sensing.
+ **Fueyo, Vivian,** Chair and Professor of Elementary Education, Ph.D., University of Kansas. Fields: Teacher Education, School-university Collaborations for Elementary Teacher Preparation, Clinical Supervision, Pre-service/In-service Teacher as Researcher.
+ **Fulton, Robert L.,** Professor of Chemistry, Ph.D. 1964, Harvard University. Fields: Theories of Linear and Nonlinear Dielectric Properties and Their Relation to Molecular Motion, Theories of Solvent Effects on Spectral Properties, Theories of Relaxation.
• **Funk, Fanchon Felice,** Associate Professor of Educational Leadership, Ed.D. 1970, University of Tennessee. Fields: Educational Administration, Curriculum and Instruction.
+ **Furbish, David J.,** Professor of Geological Sciences, Ph.D. 1985, University of Colorado. Fields: Hydrology, Geomorphology.
• **Gaber, Brian,** Assistant Professor of Music Education, M.M. 1986, Eastman School of Music. Fields: Contemporary Media.
• **Gaede, Owen F.,** Professor of Computer Science, Ph.D., University of Illinois. Fields: Instructional Systems.
+ **Gaffney, Betty J.**, Professor of Biological Science, Ph.D. 1996, Stanford University. Fields: Lipid Oxidation, Metalloenzymes, Magentic Resonance.
+ **Galeano, Juan C.**, Associate Professor of Modern Languages and Linguistics, Ph.D. 1991, Kentucky. Fields: Contemporary Latin American Poetry and Politics, Latino Poetry in the United States, and Amazonian Culture.
• **Gallagher, Kevin,** Assistant Professor of Management Information Systems, Ph.D. 2002, Case Western Reserve University. Fields: Management of Information Systems, Evolution of Information Systems, Management of Knowledge and Organizational Learning and System Analysis, Design and Implementation.
+ **Gallard, Alejandro J.,** Associate Professor of Curriculum and Instruction, Ph.D., Michigan State. Field: Science Education.
+ **Gallivan, Kyle**, Associate Professor of Computer Science, Ph.D. 1983, University of Illinois. Fields: Numerical Algorithms, High-performance Computing, Signal and Image Processing Dynamical Systems.
• **Garcia-Roig, Lillian**, Associate Professor of Art, M.F.A.
+ **Gardner, Joann,** Associate Professor of English, Ph.D. 1983, Johns Hopkins University. Fields: Victorian, Modern British and Irish, Creative Writing.

+ **Garmestani, Hamid,** Associate Professor of Mechanical Engineering, Ph.D., Cornell University. Fields: Structural Mechanics, Material Science, Composite Materials
+ **Garretson, Peter P.,** Associate Professor of History, Ph.D. 1974, University of London. Fields: Middle East, North Africa.
• **Garriga, Carlos,** Visiting Assistant Professor of Economics, Ph.D. 1999, University de Barcelona. Fields: Macroeconomics, Public Finance, Financial Economics.
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+ **Gathegi, John N.**, Associate Professor of Information Studies, Ph.D. 1990, University of California at Berkeley. Fields: Information Technology and the Law, Intellectual Property Rights.
• **Gatzlaff, Dean H.,** Professor and Chair of Risk Management/Insurance and Real Estate and Program in Business Law, Ph.D., University of Florida. Fields: Real Estate Valuation, Real Estate Investments.
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+ **George, Alan D.,** Associate Professor of Electrical and Computer Engineering, Ph.D., Florida State University. Fields: Specialized Computer Architectures and Systems including Parallel Computing, Fault-Tolerant Computing, and Networks.
+ **Georgiev, Lubomir Z.,** Associate Professor, Music Performance, Artist Diploma 1988, Indiana School of Music. Field: Cello Performance.
• **Gerard, Gregory J.,** Assistant Professor of Accounting, Ph.D. 1998, Michigan State University. Field: Accounting Information Systems
• **Gerato, Erasmo G.**, Professor of Modern Languages and Linguistics, Ph.D. 1974, University of Wisconsin. Fields: Nineteenth Century Literature– French and Italian, Twentieth Century Italian Literature.
+ **Gerber, Larry J.,** Professor of Music, M.M. 1974, Colorado State University. Fields: Voice Performance, Voice Literature.
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+ **Gert, Joshua**, Visiting Assistant Professor of Philosophy, Ph.D. 1998, University of Illinois at Chicago. Fields: Ethics, Value Theory, Practical Reason.
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+ **Gielisse, Peter J.,** Professor of Mechanical Engineering, Ph.D., Ohio State University. Fields: Materials Science, High-temperature Composite Materials, Superconducting Materials.
+ **Gilmer, Penny J.,** Professor of Chemistry, Ph.D. 1972, University of California at Berkeley. Fields: Biochemistry, Immunochemistry, Biochemical Nature of Cell-cell Recognition, Lysosomal Processing, Biodegradation of Toxic Wastes.
+ **Gilmer, Robert,** Professor of Mathematics, Ph.D. 1961, Louisiana State University. Fields: Theory of Commutative Rings, Modules and Fields.
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+ **Glendenning, Karen K.,** Professor of Psychology, Ph.D. 1971, Ohio State University. Fields: Neuroanatomy and Neuropsychology, especially Pathways and Neurotransmitters in the Brain for Sound Localization, Evolution of Sensory Systems in the Brain, Neuropsychological Disorders.
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• **Glenn, Tim,** Assistant Professor of Dance, M.F.S. 1999, Ohio State University. Fields: Choreography Dance and Technology.
+ **Goff, C. Bryan,** Professor of Music, M.M. 1968, University of Colorado. Fields: Trumpet Performance, Brass Literature.
+ **Golden, Leon,** Professor of Classics and Director of the Humanities Program, Ph.D. 1958, University of Chicago. Fields: Greek Literature and Classical Literary Criticism.
+ **Goldsby, Kenneth A.,** Associate Professor of Chemistry, Ph.D. 1983, University of North Carolina at Chapel Hill. Fields: Directed Electron Transfer and Intervalence Transfer in Mixed-Valence Complexes, Chemically Coupled Electron Transfer Reactions, Electrochemistry.
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+ **Goldsmith, Ronald E.,** Professor of Marketing, Ph.D. 1983, University of Alabama. Fields: Survey Research, Consumer Behavior, Value Systems.
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• **Goodman, Robin T.,** Assistant Professor of English, Ph.D. 1997, New York University. Fields: Postcolonial Literature and Theory, Feminism, Literatures of the Americas, Cultural Studies.
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• **Graham, Pamela W.,** Director of the Masters of Social Work Program and Associate Professor of Social Work, M.S.W. 1977, Florida State University. Fields: Family and Social Work, Child Welfare and Health Care.
+ **Graham-Jones, Jean,** Associate Professor of Spanish, Ph.D., University of California at Los Angeles. Fields: Latin American Theater, Theater of the Spanish Golden Age, Literary, Critical, Dramatic and Performance Theories.
+ **Grant, Jonathan A.**, Associate Professor of History, Ph.D. 1995, Wisconsin at Madison. Fields: Imperial Russia, Soviet Union, Central Asia, Wolrd History, Economics and Business History.
+ **Gray, Edward G.**, Assistant Professor of History, Ph.D. 1996, Brown University. Field: Early American (Colonial).
+ **Greaves, Richard L.,** Professor of History, Ph.D. 1964, University of London. Fields: England, Tudor-Stuart, Social, Reformation Scotland.
+ **Greek, Cech,** Assistant Professor of Criminology, Ph.D. 1983, New School for Social Research. Fields: Criminological Theory, Crime and Media, Juvenile Delinquency, Distance Learning.
+ **Green, Elna,** Associate Chair and Associate Professor of History, Ph.D. 1992, Tulane University. Fields: New South, Women, Social Welfare.
+ **Greenbaum, Nancy**, Assistant Professor of Chemistry, Ph.D. 1984, University of Pennsylvania. Fields: Structural Biology of Pre-mRNA Splicing, RNA-RNA, RNA-Protein, RNA-Metal Ion Complexes Probed by Solution NMR and Other Spectroscopic Techniques.
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• **Gregory, S. Dianne,** Associate Professor of Music, M.M. 1969, The Florida State University. Field: Music Therapy.
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+ **Grise, Kay S.,** Associate Professor of Clothing, Textiles, and Merchandising, Ph.D. 1980, University of Tennessee at Knoxville. Fields: Physical Properties and Performance of Textiles.
• **Groeniger, Scott,** Assistant Professor of Studio Art and Graphic Design, M.F.A., Art Institute of Chicago.
• **Groomes, Freddie L.,** Associate Professor of Human Services and Studies, Ph.D. 1972, The Florida State University. Field: Counselor Education.
+ **Gross, Frank, B., III,** Associate Professor of Electrical and Computer Engineering, Ph.D., Ohio State University. Fields: Electromagnetics, Antenna Modeling, Radar Target Detection, Finite Element Analysis Methods.
• **Gross, Melissa,** Visiting Assistant Professor of Information Studies, Ph.D. 1998, University of California at Los Angeles. Fields: Imposed and Shared Information Seeking Behavior, Information Program and Service Design and Evaluation, and the Provision of Information to Children.
• **Grubbs, Laurie M.,** Associate Professor of Nursing, MSN; Ph.D. 1991, University of Florida. Field: Health Promotion as it relates to Exercise, Nutrition and Obesity.
+ **Gunzburger, Max,** Eppes Professor of Mathematics, Ph.D. 1969, New York University, Fields: Applied and Computational Mathematics.
+ **Gussak, David,** Visiting Assistant Professor of Art Education, Ph.D. 2001, Emporia State University. Field: Art Therapy.
+ **Gutierrez, Robert,** Assistant Professor of Social Science Education, Ed.D. 1998, Florida International University. Fields: Civic Education, Values Education, Multiculturalism.
+ **Guy, Mary Ellen,** Professor of Public Administration, Ph.D. 1981, University of South Carolina. Fields: Human Resources Management, Health Policy, Organizational Theory.
+ **Gwartney, James D.,** Professor of Economics, and Research Associate, Economic Policy and Government Program, Ph.D. 1969, University of Washington. Fields: Human Resources, Public Finance, Microeconomics.
• **Hackworth, Jason,** Assistant Professor of Geography, Ph.D. 2000, Rutgers University. Field: Urban Geography.
+ **Hadden, Sally E.,** Associate Professor of History, Ph.D. 1993, Harvard. Fields: Old South and American Legal History.
• **Hagen, Richard L.,** Associate Professor of Psychology, Ph.D. 1970, University of Illinois. Fields: Obesity, Evolutionary Psychology, Human Sexual and Bonding Behavior, Neuropsychology.
+ **Hagopian, Vasken,** Professor of Physics, Ph.D. 1963, University of Pennsylvania. Fields: Experimental Physics, Elementary Particle Physics.
+ **Hahn, Cynthia J.,** Professor of Art History, Ph.D. 1982, Johns Hopkins University. Fields: Medieval and Islamic Art.
• **Hale, Debra L.,** Assistant Professor of Theatre, M.F.A. 1981, California Institute of Art. Field: Stage Voice.
• **Hall, Millard W.,** Professor of Civil and Environmental Engineering, Ph.D. 1984, Vanderbilt University of Illinois. Fields: Water Quality, Water Resources Policy, Environmental Engineering, Hazardous Waste Management.
+ **Halpern, Paul G.,** Professor of History, Ph.D. 1966, Harvard University. Fields: Europe, 1870-1920.
+ **Hanline, Mary,** Chair and Associate Professor of Special Education, Ph.D. 1989, University of California at Berkeley. Fields: Early Childhood Special Education and Intervention.
+ **Hansen, John H.,** Professor of Educational Theory and Practice, Ph.D. 1964, University of Wisconsin. Fields: Classroom Behavior, School Improvement, Teacher Education, Elementary and Middle Schools.
+ **Hansen, Thomas F.,** Assistant Professor of Bilogical Science, Ph.D. 1997, University of Oslo. Fields: Theoretical Evolutionary Biology.
• **Hardiman, Carole J.,** Professor of Communication Disorders, M.S. 1967, The Florida State University. Fields: Aphasia, Communication Programs of the Aged, Augmentative Communication.
+ **Hardy, Melissa A.,** Professor of Sociology, and Research Associate, Institute on Aging, Ph.D. 1980, Indiana University. Fields: Aging and Life Course Studies, Economy and Society, Stratification, Quantitative Analysis.
+ **Hargreaves, Alec G.,** Professor of French, Ph.D. 1978, Sussex. Fields: Contemporary French and Francophone Studies.
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+ **Harrison, Dianne F.,** Associate Vice President, Academic Affairs and Dean of Graduate Studies, and Professor of Social Work, Ph.D. 1976, Washington University. Fields: Child Welfare, Family Social Work, Behavior Therapy, Human Sexuality.
+ **Harsanyi, Janice,** Professor of Music, B.M. 1961, Westminster Choir College. Fields: Voice Performance, Voice Literature.
+ **Hart, Thomas L.,** Professor of Information Studies, Ph.D. 1974, Case Western Reserve University. Fields: Library Media Management, Young Adult Resources, Multi-Screen Production, Building Design, Legislation, Computer Graphics.
+ **Hartline, Michael, D.,** Assistant Professor of Marketing, Ph.D. 1993, University of Memphis. Fields: Services Marketing, Customer Contact, Strategic Marketing.
• **Hartwell, Janice E.,** Associate Professor of Studio Art, M.F.A. 1969, University of Massachusetts. Field: Printmaking.
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+ **Hasselback, James R.,** Professor of Accounting, Ph.D. 1976, Michigan State University. Field: Federal Taxation.
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+ **Hawkes, Lois W.,** Professor of Computer Science, Ph.D. 1977, University of London. Fields: Fault Tolerance, Coding Theory, Intelligent Tutoring Systems.
+ **Hawkins, Hunt,** Chair and Professor of English, Ph.D. 1976, Stanford University. Fields: Twentieth Century British Literature, Post-colonial Literature in English, Creative Writing.
+ **Haymes, Emily M.,** Professor of Nutrition, Food, and Exercise Science, Ph.D. 1973, Pennsylvania State University. Fields: Nutrition and Performance, Environmental Effects on Exercise.
+ **Heald, Gary R.,** Associate Dean and Professor of Communication, Ph.D. 1977, Michigan State University. Fields: Marketing Communication and Information Systems, Development Communication, Research Methods.
+ **Heil, Wolfgang H.,** Professor of Mathematics, Ph.D. 1970, Rice University. Fields: Topology of 3-manifolds, Combinatorial Group Theory.
+ **Heitmeyer, Jeanne D.,** Associate Professor of Clothing, Textiles, and Merchandising, Ph.D. 1985, Florida State University. Fields: Merchandising, Social/Psychological Aspects of Clothing and Textiles.
+ **Hensel, Paul R.,** Associate Professor of Political Science, Ph.D. 1995, Illinois. Fields: International Relations, Conflict.
• **Heron, Melanie**, Assistant Professor of Sociology, Ph.D. 1999, Penn State University. Fields: Migration and Immigration, Demography, Race/Ethnic/Minority/Relations.
+ **Herrera, Robinson**, Assistant Professor of History, Ph.D. 1997, University of California-Los Angeles. Field: Latin America.
+ **Herrington, Carolyn D.**, Chair and Professor of Educational Leadership, Ph.D. 1977, University of Florida. Field: Educational Policy.
+ **Herrnkind, William Frank,** Professor of Biological Science, Ph.D. 1968, University of Miami. Field: Behavior and Migration of Marine Animals.
+ **Hicks, Mary Ward,** Professor of Family, Child, and Consumer Sciences, Ph.D. 1966, Pennsylvania State University. Fields: Addictions, Therapy Outcome.
+ **Hilary, Richard B.,** Associate Professor of Modern Languages and Linguistics, Ph.D. 1969, University of Wisconsin. Fields: Italian Renaissance Literature, Nineteenth Century Literature, Business–Italian.
+ **Hilinski, Edwin F.,** Associate Professor of Chemistry, Ph.D. 1982, Yale University. Fields: Mechanistic Studies of Photochemical and Thermal Reactions of Organic Compounds in Solution, Picosecond Laser Spectroscopy.
+ **Hillison, William A.,** Professor of Accounting, Ph.D. 1977, University of Florida. Fields: Auditing Theory and Application, Accounting Information Systems.
• **Hinterlong, James E.,** Assistant Professor of Social Work, Ph.D. 2002, George Warren Brown School. Fields: Gerontology, Productive Engagement in Later Life, Social Policy Analysis, Civic Engagement, Community Development, Technology of Social Work Teaching and Research.
+ **Hironaka, Eriko,** Assistant Professor of Math, Ph.D. 1990, Brown University. Fields: Algebraic Geometry, Law-dimensional Topology.
Hirsch, Adam J., Professor of Law, Ph.D., J.D. 1982, Yale University School of Law. Fields: Gratuitous Transfers, Estate Planning, Creditors Rights, Legal History.
+ **Ho, Ting-jui,** Associate Professor of Anthropology, Ph.D. 1967, Indiana University. Fields: Cultural Anthropology, Folklore, Archaeology, Southeast Asia.
• **Hochwarter, Wayne,** Assistant Professor of Management, Ph.D. 1993, Florida State University. Fields: Social Influence in Organizations, Motivation, Workplace Cynicism, Job Stress and Measurement.
• **Hodges, Anne R.,** Program Director of Music, D.M., Florida State University. Field: Arts Administration.
+ **Hodges, Donald Clark,** Professor of Philosophy, Ph.D. 1944, Columbia University. Fields: Social and Political Philosophy (especially Marxist Theory), Philosophy in Latin America, Philosophy of History.
+ **Hoekman, Timothy,** Professor of Music, D.M.A. 1982, University of Michigan. Fields: Accompanying, Vocal Coaching.
+ **Hofaker, Charles F.,** Professor of Marketing, Ph.D. 1982, University of California at Los Angeles. Fields: Mathematical Choice Models, Marketing Research, Pricing Decisions.
+ **Hofer, Kurt G.,** Professor of Biological Science, Ph.D. 1965, University of Vienna. Fields: Radiation Biology, Cell Biology, Cancer Research.
+ **Hoffman, James J.,** Professor of Management, Ph.D. 1988, University of Nebraska. Fields: Strategic Management, Ethics.
+ **Holcombe, Randall G.,** Professor of Economics, Ph.D. 1976, Virginia Polytechnic Institute and State University. Fields: Public Finance, Public Choice.
+ **Hollander, Myles,** Chair and Professor of Statistics, Ph.D. 1965, Stanford University. Fields: Nonparametric Statistics, Biostatistics, Reliability.
+ **Hollis, Patrick J.,** Associate Professor of Mechanical Engineering, Ph.D. 1986, Cornell University. Fields: Nonlinear Dynamics, Computer Aided Design, and Robotics.
+ **Holton, Robert A.,** Professor of Chemistry, Ph.D. 1971, Florida State University. Fields: Synthetic Organic, Organometallic, and Bioorganic Chemistry Total Synthesis of Natural Products.
+ **Holzman, Bruce,** Associate Professor of Music, B.S. 1972, New York University. Field: Guitar.
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• **Hook, Charles E.,** Associate Professor of Studio Art, MFA 1973, Washington University. Field: Sculpture.
+ **Horward, Donald D.,** Professor of History, Ph.D. 1962, University of Minnesota. Fields: French Revolution, Napoleon.
+ **Houck, Davis W.,** Assistant Professor of Communication, Ph.D. 1995, Penn State University. Fields: Rhetorical Criticism and Theory, American Public Address, the Body and Culture.
+ **Houle, David,** Assistant Professor of Biology, Ph.D. 1988, State University of New York. Fields: Evolutionary Genetics, Sexual Selection, Mutation, Genotypephenotype Map.
+ **Hsueh, Ya,** Professor of Oceanography, Ph.D. 1965, Johns Hopkins University. Fields: Variability in Continental Shelf Circulation as Induced by Local Variations in Surface Wind Stress and Thermohaline Forcing on both Synoptic and Seasonal Time Scales, Eddies and Long Waves Impinging from the Deep Sea, and Tidal Phenomena; Variability in Deep Ocean Currents, such as the Gulf Stream, the Kuroshio, and Gulf of Mexico Loop Current and its Implications in Terms of the General Circulation of Oceans.
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+ **Hunter, Christopher,** Professor of Mathematics, Ph.D. 1960, University of Cambridge. Fields: Galactic Dynamics, Fluid Dynamics, Computer-generated Series Expansions.
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+ **Ihlanfeldt, Keith**, DeVoe Moore Eminent Scholar and Professor of Economics, Ph.D. 1978, Washington University (St. Louis). Fields: Urban Economics, Local Public Finance, Applied Microeconomics.
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+ **Imwold, Charles H.,** Chair and Professor of Physical Education, Ph.D. 1980, University of Pittsburgh. Fields: Teacher Behavior, Skill Analysis, Curriculum.
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+ **Isaac, Larry W.,** Professor of Sociology, Ph.D. 1979, Indiana University. Fields: Labor Process, Political Economy, Historical Methods.
+ **Isaac, Robert M.,** Quinn Eminent Scholar Chair of Economics, Ph.D., California Institute of Technology.
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• **Jacobson, R. Dan**, Assistant Professor of Geography, Ph.D. 1999, Queen's University of Belfast. Fields: Geographical Information Systems, Cognitive Mapping, Geographies of Blindness.
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+ **James, Patrick,** Professor of Political Science, Ph.D., University of Maryland. Field: International Relations.
+ **Jenks, Frederick L.,** Service Professor of Curriculum and Instruction, Ph.D. 1971, Wayne State University. Fields: Foreign and Second Language Education, Cross-cultural Education, Teaching English as a Second Language, Instructional Design.
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• **Jimenez, Alexander**, Assistant Professor of Music, D.M. 1999, Florida State University. Fields: Orchestra, Conducting, Percussion.
+ **Johnson, David F.,** Associate Professor of English, Ph.D., Cornell. Field: Medieval Studies.
+ **Johnson, Dewayne J.,** Professor of Physical Education, Ph.D. 1973, Texas A&M University. Fields: Educational Administration, Fitness Education.
+ **Johnson, Frank,** Associate Professor of Psychology, Ph.D. 1989, University of California, Riverside. Fields: Development of Brain and Behavior, Regulation of Neuron Survival, Formation of Sex Differences in Neural Structure.
Johnson, Suzanne Bennett, Professor and Chair of Medical Humanities and Social Sciences, Medicine, Ph.D. 1974, State University of New York at Stony Brook. Field: Clinical Health Psychology.
+ **Joiner, Thomas**, Professor of Psychology, Ph.D. 1993, University of Texas-Austin. Fields: Interpersonal and Cognitive Causes, Correlates, and Consequences of Depression, Bulimia Nervosa, and Anxiety Disorders, the Nature and Treatment of Suicidality.
• **Jones, Evan,** Assistant Professor of Music Theory and Composition, Ph.D. 2002, University of Rochester, Eastman School of Music. Field: Music Theory.
+ **Jones, Ithel**, Associate Professor of Early Childhood Education, Ed.D. 1994, University of Georgia. Fields: Early Childhood Education, Child Development.
+ **Jones, James P., Jr.**, Professor of History, Ph.D. 1960, University of Florida. Field: United States Civil War.
• **Jones, Lee**, Associate Dean and Associate Professor of Higher Education, Ph.D. 1995, Ohio State University. Fields: Organizational Development, Human Resource Development, Higher Education Administration, Leadership Development.
+ **Jones, Maxine D.**, Professor of History, Ph.D. 1982, The Florida State University. Fields: Nineteenth – Century United States, Black History.

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+ **Jordan, Felecia F.,** Associate Professor of Communication, Ed.D. 1989, West Virginia. Fields: Interpersonal (Nonverbal, Gender) Communication, Instructional Communication.
- **Jordan, William F.,** Professor of Accounting, Ph.D. 1974, Georgia State University. Fields: Federal Taxation, Accounting Information Systems, Financial Accounting, Managerial Accounting.
+ **Jorgensen, Corinne,** Associate Professor of Information Studies, Ph.D. 1995, Syracuse University. Fields: Image Description, Indexing and Retrieval, Human Cognitive and Perceptual Factors in the Design of Image-retrieval Systems.
+ **Josserand, J. Kathryn,** Associate Professor of Anthropology, Ph.D., Tulane University. Fields: Anthropology, Linguistics, Geography, Mexico and Central America, Maya Hieroglyphic Writing.
+ **Jumonville, Neil T.,** Chair and Professor of History, Ph.D., Harvard. Fields: American Intellectual History, American Historiography, and America since 1945.
+ **Kabbaj, Mohamed,** Visiting Assistant Professor of Biomedical Sciences, Medicine, Ph.D. 1997, University Bordeaux II, France. Fields: Neuroscience, Pharmacology.
+ **Kacmar, Charles J.,** Associate Professor of Computer Science, Ph.D., Texas A&M University. Fields: Hypertext/Hypermedia, Human-Computer Interaction, Object-oriented Systems, Software Engineering, Software Development Tools.
+ **Kacmar, K. Michele,** Professor of Management, Ph.D., Texas A&M University. Fields: Organizational Behavior, Organizational Politics, Impression Management, Human Resource Management.
- **Kalbian, Aline**, Assistant Professor of Religion, Ph.D. 1996, University of Virginia. Fields: Religion and Ethics, Catholic Moral Theology, Gender Studies, Medical Ethics.
+ **Kalu, Eric E.**, Assisant Professor of Chemical Engineering, Ph.D. 1991, Texas A & M. Fields: Electrophsiological Process, Electrochemical Ethics.
+ **Kalu, Peter N.,** Assistant Professor of Mechanical Engineering, Ph.D. 1986, London. Fields: Microscopy, Texture and Microtexture, Micromechanism of Deformation and Fracture, Recrystallization.
+ **Kamata, Akihito**, Assistant Professor of Educational Psychology, Ph.D. 1998, Michigan State. Fields: Educational Measurement, Psychometrics.
- **Kaminsky, Stuart M.**, Professor of Motion Picture, Television, and Recording Arts, and Director, Graduate Film Conservatory, Ph.D. 1971, Northwestern. Fields: Screenwriting, Film History and Criticism, Directing, Genre Studies, Narrative Writing (Short Story and Novel).
- **Kangas, David**, Assistant Professor of Religion, Ph.D. 1999, Yale. Fields: Philosophy of Religion, Religous Ethics in the Modern Period.
+ **Karahanna, Elena**, Assistant Professor of Information and Management Science, Ph.D. 1993, University of Minnesota. Fields: Technology Adoptions, Media Choice, Cross-Cultural Impacts.
- **Karioth, E. Joseph**, Professor of Theatre, Ph.D. 1967, University of Minnesota. Field: Theatre Management.
- **Karioth, Sally J.,** Associate Professor of Nursing, Ph.D. 1977, The Florida State University. Fields: Family and Community Nursing, Grief Therapy.
+ **Kaufman, Roger,** Professor of Educational Research, and Director, Center for Needs Assessment and Planning, Ph.D. 1963, New York University. Fields: Needs Assessment, System Planning, Policy Creation.
- **Kavka, Martin,** Assistant Professor of Religion, Ph.D. 2000, Rice University. Fields: Modern European and American Jewish Thought, Post-Holocaust Thought, Postmodern Philosophy of Religion.
  Keel, Brooks, Associate Vice President for Research, Professor of Biomedical Sciences, Medicine, Ph.D. 1982, Medical College of Georgia. Fields: Reproductive Endocrinology, Infertility, Assisted Reproductive Technology, Human Sperm Function.
+ **Keesecker, Jeffrey,** Associate Professor of Music, M.S., Julliard. Fields: Woodwind Performance/Literature.
+ **Keller, John M.,** Professor of Educational Research, Ph.D. 1974, Indiana University. Fields: Motivation in Instructional Design, Project Management.
+ **Keller, Laura R.,** Associate Professor of Biological Science, Ph.D. 1980, University of Virginia. Fields: Molecular Genetics, Regulation of Gene Expression, Proteins Controlling Transcription.
+ **Keller, Thomas C.S., III,** Associate Professor of Biological Science, Ph.D. 1981, University of Virginia. Fields: Cell and Molecular Biology of the Cytoskeleton, Cytoskeletal Regulation and Energetics.
+ **Kelley, Colleen,** Associate Professor of Psychology, Ph.D. 1983, Stanford University. Fields: Human Memory and Cognition; Aging and Memory, Judgement.
+ **Kelly, F. Donald,** Associate Professor of Human Services and Studies, Ph.D. 1970, University of Florida. Fields: Personality Assessment, Family Therapy, Behavior Management in Home and School.
- **Kelly, Steven**, Assistant Professor of Music Education, Ph.D. 1993, University of Kansas. Field: Music Education.
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- **Kemker, Brett E.**, Assistant Professor of Communication Disorders, Ph.D. 1999, University of Florida. Fields: Audiologic Rehabilitation, Cognitive Auditory Attention Resource Allocation, Otoacoustic Emissions, Brain Auditory Evoked Response.
+ **Kemper, Kirby W.,** Chair and Professor of Physics, Ph.D. 1968, Indiana University. Fields: Experimental Physics, Polarization Studies of Nuclear Reactions.
- **Kennedy, William L.,** Associate Professor of Music, M.M. 1977, Eastman School of Music. Field: Jazz Studies.
+ **Kent, Aubrey W**., Assistant Professor of Sports Management, Ph.D. 1999, Ohio State University. Field: Leadership and Organizational Theory.
+ **Kercheval, Alec,** Associate Professor of Mathematics, Ph.D. 1987, University of California at Berkeley. Fields: Financial Mathematics, Dynamical Systems
+ **Ketchen, David J.**, Associate Professor of Management, Ph.D. 1994, Penn State University. Field: Strategic Management.
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- **Kim, Keon wook,** Visiting Assistant Professor of Electrical Engineering, Ph.D. 2001, University of Florida. Fields: High-performance Computing, Distributed and Parallel Processing, Advance Digital Signal Processing, Cluster Computing.
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- **Kimbrell, James**, Assistant Professor in English, Ph.D. 1999, University of Missouri. Field: Creative Writing (poetry).
+ **Kimel, Jacob Daniel,** Professor of Physics, Ph.D. 1966, University of Wisconsin-Madison. Fields: Theoretical Physics; Elementary Particle Physics, Computational Physics.
- **Kind, Kennita,** Assistant Professor of Clothing, Textiles, and Merchandising, Ph.D. 1999, University of Georgia. Fields: International Trade of Apparel and Interior Products, Residential Management.
+ **Kinloch, Graham,** Associate Dean and Professor of Sociology, Ph.D. 1968, Purdue University. Fields: Minority Group Relations, Sociological Theory, Sociology of Knowledge.
+ **Kirby, David K.,** Professor of English, Ph.D. 1969, Johns Hopkins University. Fields: Nineteenth-Century American Literature, Contemporary Literature, Creative Writing.
+ **Kish, Stephen A.,** Associate Chair and Associate Professor of Geological Sciences, Ph.D. 1982, University of North Carolina. Fields: Igneous and Metamorphic Petrology, Isotope Geology, Economic Geology.
+ **Kistner, Janet A.,** Chair and Professor of Psychology, Ph.D. 1981, State University of New York at Binghamton. Fields: Learning and Behavior Problems of Children, Problematic Social Interactions of Children, Childrens Responses to Failure.
+ **Kite-Powell, Jeffery T.,** Professor of Music, Ph.D. 1976, University of Hamburg, West Germany. Fields: Musicology, Music Literature, Early Music.
+ **Klassen, Eric P.,** Professor of Mathematics, Ph.D. 1987, Cornell. Fields: Topology and Geometry of Three- and Four-dimensional Manifolds, Knot Theory, Riemann Surfaces, Representation Theory; Gauge Theory.
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+ **Klay, William Earle,** Professor of Public Administration and Director, Askew School of Public Administration and Policy. Ph.D. 1974, University of Georgia. Fields: Policy Development, Budgeting and Financial Administration, Personnel and Labor Relations.
+ **Kleck, Gary D.**, Professor of Criminology and Criminal Justice, Ph.D. 1979, University of Illinois at Urbana-Champaign. Fields: Gun Control, Weapons/Criminology, Violence.
+ **Kline, John**, Assistant Professor of Psychology, Ph.D. 1996, University of Arizona. Fields: Perceptual and Psychophysiological Correlates of Inhibition of Emotion in Defensiveness.
+ **Klooster, Daniel J.**, Assistant Professor of Geography, Ph.D. 1997, University of California at Los Angeles. Fields: Mexico, Peasant Agriculture, Deforestation Resource Conservation.
+ **Knight, Gary**, Assistant Professor of Marketing, Ph.D. 1997, Michigan State. Fields: International Business and Research Methodology.
+ **Kodras, Janet E.,** Professor of Geography, Ph.D. 1982, Ohio State University. Fields: Hunger and Poverty, Population, Public Policy, Quantitative Methods.
- **Koehlinger, Amy L.,** Assistant Professor of Religion, M.A. 1996, University of Oregon. Fields: American Religious History, American Catholicism.
- **Koenig, Peter A.,** Associate Professor of Interior Design, Masters of Landscape Architecture and Environmental Planning, 1975, Utah State University. Fields: Architectural Rendering, Non-Residential Design, and Office Space Planning.
- **Kohler, Patricia L.,** Associate Professor of Nursing, M.S.N., Mississippi University for Women. Field: Gerontology.
+ **Kohout, Ladislav,** Professor of Computer Science, Ph.D. 1978, University of Essex. Fields: Knowledge Engineering, Fuzzy Sets and Systems, Artificial Intelligence, Knowledge-Based Systems, Fuzzy Relational Architectures, Medical Computing.
+ **Koorland, Mark A.,** Professor of Special Education, Ph.D. 1977, University of Florida. Fields: Emotional Handicaps, Learning Disabilities, Applied Behavior Analysis, Behavior Management Techniques.
+ **Kopriva, David A.,** Professor of Mathematics, Ph.D. 1982, University of Arizona. Fields: Computational Fluid Dynamics, Spectral Methods.
- **Koschnik, Albrecht,** Visiting Assistant Professor of History, M.A. 1992, University of Virginia. Field: Early American History.
+ **Kosloski, Gary**, Professor of Music, D.M. 1977, Indiana University. Fields: Violin.
+ **Kostka, Joel E.,** Assistant Professor of Oceanography, Ph.D. 1993, University of Delaware. Fields: Microbial Ecology and Biogeochemistry, Carbon and Nutrient Cycling in Coastal Marine Environments, Bacteria/Mineral Interactions.
+ **Kowalsky, Frank**, Professor of Music, D.M.A. 1973, Catholic University. Fields: Clarinet Performance, Woodwind Literature.
+ **Krafft, Marie E.,** Professor of Chemistry, Ph.D. 1983, Virginia Polytechnic Institute and State University. Fields: Synthetic Organic and Organometallic Chemistry, Natural Products Synthesis.
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+ **Kwan, Bing W.**, Associate Professor of Electrical and Computer Engineering, Ph.D. 1984, Ohio State University. Fields: Transient Electromagnetic Scattering Phenomenon, Microstrip Antennas, Asymptotic Techniques and Numerical Methods in Electromagnetics, Artificial Neural Systems.
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+ **Lake, Vickie E.,** Assistant Professor of Early Childhood Education, Ph.D. 1999, University of Texas. Fields: Moral Education, Anti-violence Programs and Curriculum, Teacher Education, Qualitative Research.
+ **Lamont, Bruce T.,** Professor of Management, Ph.D. 1989, University of North Carolina. Fields: Strategic Management, Diversification.
- **Lan, Feng**, Assistant Professor of Modern Languages, Ph.D. 1998, University of Notre Dame, Field: Chinese Language.
+ **Landing, William M.,** Professor of Oceanography, Ph.D. 1983, University of California at Santa Cruz. Fields: Chemical Oceanography and Low-Temperature Aqueous Geochemistry, Biogeochemistry of Trace Elements in Marine and Fresh Waters with Emphasis on Effects of Biological and Inorganic Processes on Dissolved/Particulate Fractionation, Solution Speciation, and Redox Chemistry; Development of Analytical Schemes for Studies of Trace Element Equilibrium Complexes and Redox States in Natural Waters.
- **Landry, Timothy,** Assistant Professor of Marketing, Ph.D. 2001, University of Missouri. Fields: Electronic Business, Customer Relationships, Internet Communities, Cross-disciplinary Research, Technology's Impact on Boundary Spanning Employees, Interpersonal Dynamics in Sales and Service Encounters.

+ **Lang, Alan R.,** Professor of Psychology, Ph.D. 1978, University of Wisconsin-Madison. Fields: Psychosocial Aspects of Health Problems and Behavior Disorders, especially the Addictions; Alcohol and Family Interactions, including Conversational Behavior, General Psychopathology, and Individual Differences.
+ **LaPointe, Leonard L.,** Francis Eppes Professor of Audiology and Speech Pathology, Ph.D. 1969, University of Colorado. Fields: Adult Cognitive Functioning, Speech-language Pathology, Gerontology, Adult Language Disorders.
Larson, John W., Associate Professor of Law, J.D. 1964, University of Iowa College of Law. Fields: Business Associations, Securities Regulation, and Creditors Rights.
+ **Laughlin, Karen,** Dean of Undergraduate Studies and Associate Professor of English, Ph.D. 1982, University of Toronto. Fields: Modern Drama, Feminist Theory, Creative Writing.
+ **Launer, Michael K.,** Professor of Modern Languages and Linguistics, Ph.D. 1970, Princeton University. Fields: Applied Linguistics and Structure of Modern Russian.
• **Lazier, Kathryn M.,** Associate Professor of Nutrition, Food, and Exercise Science, Ph.D. 1982, University of Nebraska. Fields: Computerization in Dietetics, Infant and Child Nutrition, Nutrition Education, Protein and Amino Acid Content of Foods.
• **Leahy, Gerard J.,** Associate Professor of Theatre, M.F.A. 1967, Yale University. Field: USA 829, Scenery and Costume Design.
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Lee, Tahirih V., Associate Professor of Law, J.D. 1989, Yale; Ph.D. 1990, Yale. Fields: Chinese Law, Chinese Legal History, Comparative Law, Civil Procedure.
• **Leib, Jonathon,** Associate Professor of Geography, Ph.D. 1992, Syracuse University. Fields: Political Geography, Elections, Redistricting, Race, Political Representations of the South.
+ **Leparulo, William E.,** Professor of Modern Languages and Linguistics, Dottore in Materie Letterarie 1960, Salerno, Italy. Field: Modern Italian Literature.
• **Lesser, Janna,** Assistant Professor of Nursing, Ph.D. 1997, University of California Los Angeles.
+ **Leszczynska, Danuta,** Associate Professor of Civil and Environmental Engineering, Ph.D. 1978, Technical University of Wroclaw. Field: Environmental Engineering.
• **Leushuis, Reinier,** Visiting Assistant Professor of Modern Languages, Ph.D. 2000, Princeton. Fields: Sixteenth-Century French and Italian Literature.
+ **Levenson, Cathy W.,** Associate Professor of Nutrition, Food and Exercise Science, Ph.D., University of Chicago. Fields: Nutrient Regulation of Gene Expression, Molecular Regulation of Trace Mineral Metabolism.
+ **Levenson, David B.,** Associate Professor of Religion, Ph.D. 1980, Harvard University. Fields: New Testament and Early Christianity, Early Judaism, Greco-Roman Religions.
+ **Levitan, Don R.,** Associate Professor of Biological Science, Ph.D. 1989, Delaware. Field: Evolutionary Ecology and Population Biology of Marine Invertebrates.
Levitt, Morton, Associate Professor of Biomedical Sciences, Medicine, M.D. 1972, Duke University. Field: Anatomic Pathology.
+ **Levitz, Hilbert,** Professor of Computer Science, Ph.D. 1965, Pennsylvania State University. Fields: Program Verification (PROLOG), Macro Programs for Primitive Recursive Functions.
+ **Lewis, Sandra,** Assistant Professor of Visual Disabilities, Ed.D., University of California at Berkeley. Fields: Education and Rehabilitation for Blind and Visually Impaired Individuals, Service Delivery, Public Policy.
+ **Leysieffer, Frederick W.,** Assistant Vice President for Academic Affairs and Professor of Statistics, Ph.D. 1964, University of Michigan. Fields: Stochastic Processes, Environmental Science Applications, Sample Surveys.
+ **Lhamon, William T.,** Jr., Professor of English, Ph.D. 1973, Indiana University. Fields: American Literature, Popular Culture, Folklore.
+ **Li, Hong,** Assistant Professor of Chemistry, Ph.D. 1994, University of Rochester. Fields: X-ray Crystallography, Molecular Principles of Protein and RNA Interactions, Gene Expression and Regulation.
• **Li, Hui,** Visiting Assistant Professor of Electrical Engineering, Ph.D. 2000, University of Tennessee. Fields: Power Electronics, Motor Drive Control, Modeling and Simulation of Control System.
+ **Li, Lei,** Assistant Professor of Statistics, Ph.D. 1998, University of California at Berkeley. Fields: Application of Statistics to Genetics and Biology, Time Series Analysis, Model Selection.
+ **Liang, Richard,** Visiting Associate Professor of Industrial Engineering, Ph.D. 2000, Beijing University of Aeronautics. Fields: Nonotube-based Composites, Liquid Composite Molding (LCM) Technologies and Processing Modeling, Macro and Micro Structure Characterization of Composite Materials, Multifunctional Composites, Composite Tooling Technologies.
Li, Spencer D., Assistant Professor of Criminology, Ph.D., University of Illinois.
+ **Licht, Barbara G.,** Associate Professor of Psychology, Ph.D. 1980, University of Illinois at Urbana-Champaign. Fields: Motivational Problems of Learning Disabled and Behavior Problem Children, Motivational Determinants of Sex Differences in Achievement, Promoting Participation in Physical Exercise.
+ **Licht, Mark H.,** Associate Professor of Psychology, Ph.D. 1980, University of Illinois at Urbana-Champaign. Fields: Chronic Mental Patients, Assessment and Treatment in Residential Settings (e.g., mental hospitals), Psychological/Behavioral Assessment and Measurement, Psychosocial Treatment of Adult Populations, Computer Applications in Mental Health Research and Services.
+ **Lick, Dale,** University Professor, Ph.D. 1965, University of California. Fields: Leading Organizational Change, Transformational Leadership, Learning Organizations, Mathematics.
+ **Light, Robley J.,** Professor of Chemistry, Ph.D. 1960, Duke University. Fields: Secondary Metabolism in Fungi and Plants, Lipid Metabolism and Function.
+ **Lind, David M.,** Associate Professor of Physics, Ph.D. 1986, Rice University. Fields: Experimental Physics, Surfaces, Thin Films, Magnetic Properties of Solids.
• **Lindbloom, Terri L.,** Associate Professor of Art, M.F.A. 1988, University of New Mexico. Field: Sculpture.
• **Lipovetsky, Leonidas,** Associate Professor of Music, M.S. 1969, The Juilliard School. Fields: Piano Performance, Keyboard Literature.
+ **Liu, Guosheng,** Assistant Professor of Meteorology, Ph.D. 1990, Nagoya University. Fields: Radioactive Transfer, Satellite Remote Sensing, and Applications of Satellite Measurements to Weather Forecasting and Climate Research.
+ **Liu, Xiuwen,** Assistant Professor of Computer Science, Ph.D. 1999, Ohio State University. Fields: Computer Vision, Visual Recognition and Modeling, Image Compression, Computer Graphics, Machine Learning, Artificial Intelligence.
+ **Livingston, Robert J.,** Professor of Biological Science, and Director, Center for Aquatic Research and Resource Management, Ph.D. 1970, University of Miami. Fields: Marine Biology, Aquatic Pollution Biology, Aquatic Ecology.
• **Lloyd, Donald,** Assistant Professor of Sociology, Ph.D. 2000, University of Toronto. Fields: Mental Health, Alcohol and Drugs, Quantitative Methodology.
+ **Lo, Winston W.,** Professor of History, Ph.D. 1970, Harvard University. Fields: Asia, China.
+ **Locke, Bruce R.,** Professor of Chemical Engineering, Ph.D., North Carolina State. Fields: Bioengineering-Macromolecular Separations Electrophoretic Transport, Chromatography, Enzyme Reaction Catalystic Membrane Reactors, Pattern Formation in Biological Systems Wutg Reaction/Diffusion Processes, Environmental Engineering-plused Corona Discharge Technology in Air and Water Treatment, Advanced Oxidation by Ozone and Photocataysis.
+ **Logan, Timothy M.,** Associate Dean and Associate Professor of Chemistry, Ph.D. 1991, Chicago. Fields: Protein Structural Biology; Glycosylated Protein Structure and Function; Protein Dynamics in Catalysis; High Resolution NMR Spectroscopy.
• **Loney, Bryan,** Assistant Professor of Psychology, Ph.D. 2000, University of Alabama. Fields: Clinical Psychology, Gender Differences in Severe Youth Antisocial Behavior, Subtyping of Childhood Conduct Disorders, Child and Adolescent Psychopathy, Developmental Pyschopathology, Emotional Processing and the Disruptive Behavior Disorders, Hormones and Childhood Emotional/Behavioral Functioning.
• **Long, Tim**, Assistant in Film of Motion Picture, Television and Recording Arts. Field: Screenwriting.
+ **Lonigan, Christopher,** Professor of Psychology, Ph.D., State University of New York at Stony Brook. Fields: Clinical Psychology, Developmental Psychopathology, Emotional and Motivational Influences on the Development of Psychopathology, Early Intervention (language/literacy) and Cognitive Behavior and Social Development, PTSD in Children, Language Acquisition, Language and Behavior Disorders of Childhood.
+ **Loper, David E.**, Professor of Geological Sciences and Research Associate, Director Geophysical Fluid Dynamics Institute, Ph.D. 1965, Case Western Reserve University. Fields: Evolution and Structure of the Earth's Core and Mantle, Dynamics of Partially Solidified Systems.
+ **Losh, Susan,** Associate Professor of Educational Research, Ph.D. 1973, University of Michigan. Fields: Sex Roles and Gender, Statistics and Methods, Social Psychology.
• **Lottimer, Edmund,** Assistant in Film, School of Motion Picture, Television and Recording Arts, B.A. 1978, University of California at Santa Cruz. Fields: Directing, Producing, Screenwriting.
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+ **Lunstrum, John P.,** Professor of Educational Theory and Practice, Ed.D. 1960, Indiana University. Fields: Reading in Social Studies, Controversial Issues.
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+ **Lynn, Susan K.,** Associate Professor of Physical Education, Ph.D., University of South Carolina at Columbia. Field: Physical Education.
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• **Madsen, Charles H., Jr.,** Professor of Psychology, Ph.D. 1965, University of Illinois. Fields: Suicidology, Cognitive Behavioral Therapy, Hypnotherapy, Familial Interactions.
+ **Madsen, Clifford K.,** Professor of Music, Ph.D. 1963 Florida State University. Fields: Music Therapy, Music Education.
+ **Magnan, Jerry F.,** Associate Professor of Mathematics, Ph.D. 1979, University of Miami. Fields: Bifurcation Theory, Parallel Computing.
• **Maier-Katkin, Birgit,** Assistant Professor of German, Ph.D. 1998, Pennsylvania State University. Fields: Late 19th and 20th Century German Literature, Gender and Cultural Studies.
+ **Maier-Katkin, Daniel,** Dean and Professor of Criminology and Criminal Justice, J.D. 1968, Columbia University. Diploma in Criminology (M. Phil.), University of Cambridge, 1969. Fields: Criminology and Criminal Law, Law and Society, Crime and Delinquency/Juvenile Justice, Infanticide.
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+ **Marcus, Nancy H.,** Professor of Oceanography, Director, Program for Women in Math, Science, and Engineering, Ph.D. 1976, Yale University. Fields: Evolution, Ecology, and Population Genetics of Marine Zooplankton, Developmental Responses of Organisms to Environmental Change, Dormancy.
+ **Mariscal, Richard N.,** Professor of Biological Science, Ph.D. 1966, University of California, Berkeley. Fields: Marine Biology, Behavior, Physiology, and Ultrastructure of Invertebrates.
+ **Maroney, Patrick F.,** Professor of Risk Management/Insurance and Real Estate and Program in Business Law, J.D. 1975, University of Florida. Fields: Administrative Law, Insurance Law, Workers Compensation, Insurance Regulations.
+ **Marquis, Milton H.,** Professor of Economics, Ph.D. 1985, Indiana University. Fields: Monetary Economics, Econometrics.
+ **Marrinan, Rochelle A.,** Associate Professor of Anthropology, Ph.D. 1975, University of Florida. Fields: Prehistoric and Historic Archaeology, Method and Theory in Archaeology, Zooarchaeology, Southeastern United States and Caribbean.
+ **Marshall, Alan,** Professor of Chemistry, Ph.D., University of British Columbia. Fields: Fourier Transform Ion Cyclotron Resonance mass Spectrometry, Theory, Technique Development, and Experimental Applications, New Ionization Methods, Ultrahigh Resolution Mass Analysis, Surface Analysis, Mass-selected Ion Molecule Reactions for Synthesis, Reactivity, Spectroscopy, and Structural Analysis of New Species.
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- **Martin, Lanny,** Assistant Professor of Political Science, Ph.D. 2000, University of Rochester. Fields: Comparitive Politics, Political Methodology.
+ **Martin, Patricia Y.,**Professor of Sociology, Ph.D. 1969, The Florida State University. Fields: Sociology of Organizations, Sociology of Gender, Sociology of Work, Field Research Methods.
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+ **Mascagni, Michael,** Professor of Computer Science, Ph.D. 1987, New York University. Fields: Monte Carlo Methods, Random Number Generation; Computational Biology and Materials, Mathematical Software, Parallel, Distributed and Web-based Computing.
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- **Mason, Katherine P.,** Dean and Professor of Nursing, Ed.D. 1984, University of Florida.
+ **Mason, Patrick,** Director, Program in African-American Studies and Associate Professor of Economics, Ph.D. 1991, New School of Social Research. Fields: Labor Economics, Political Economy.
+ **Mason, Robert,** Professor of Management Information Sciences, Ph.D. 1973, Georgia Institute of Technology. Fields: Strategic Management of Technology, Information Technology.
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+ **Matherly, Timothy A.,** Associate Professor of Management, D.B.A. 1983, Indiana University. Fields: Strategic Management, Organization Behavior, Personality and Goal Setting.
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+ **Matthews, Patricia**, Assistant Professor of Philosophy, Ph.D., University of Iowa. Fields: Kant, History of Modern Philosophy, Aesthetics.
+ **Maxwell, Sharon,** Associate Professor of Social Work, Ph.D., Florida State University. Fields: Womens Issues, Policy, Welfare Reform, Community Organization.
+ **Mayo, John K.,** Dean and Professor of Communication, Ph.D. 1972, Stanford University. Fields: Development, Communication, Diffusion of Innovations, Distance Education.
+ **Mazza, Nicholas F.,** Professor of Social Work, Ph.D. 1981, Florida State University. Fields: Family Social Work, Arts and Mental Health, Mental Health.
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- **McCarty, Betty Jo,** Associate Professor of Educational Theory and Practice, Ed.D., Oklahoma State. Fields: Educational Theory and Practice.
- **McClung, Steven,** Assistant Professor of Communication, Ph.D. 1999, University of Tennessee. Fields: Traditional Media and Adoption of the Web, College Radio Websites, the NCAA's use of the Internet, Radio's Use of Remotes as a Promotional/Marketing Tool.
+ **McClure, Charles, R.** Frances Eppes Professor of Information Studies, Ph.D. 1977, Rutgers University. Fields: Planning and Evaluation of Information Services, Federal Information Policy, Information Resources Management.
+ **McConnell, Michael,** Associate Professor of Music, B.M. 1976, University of Cincinnati, College Conservatory of Music. Field: Opera.
- **McCullough, Kathleen A.,** Assistant Professor of Business Administration, Ph.D. 2000, University of Georgia.
+ **McDowell, Stephen**, Chair and Associate Professor of Communication, 1988, York University of Toronto-Ontario, Canada. Fields: Communications Policy, New Technologies, International Communication.
+ **McDuffie, Ernest L.,** Assistant Professor of Computer Science, Ph.D. 1995, Florida Institute of Technology. Fields: Applied and Theoretical Artifical Intelligence, Expert Systems, Neural Network, Knowledge Engineering, Temporal Reasoning, Automatic Scheduling, and Data Mining.
+ **McElrath, Joseph R.,** Associate Dean, Arts and Sciences, and Professor of English, Ph.D. 1973, University of South Carolina. Fields: Nineteenth-Century American Literature, Bibliography and Textual Studies.
+ **McGee, Daniel L.,** Professor of Statistics, Ph.D. 1978, John Hopkins University.
+ **McGregory, Jerrilyn,** Assistant Professor of English, Ph.D., University of Pennsylvania. Fields: Folklore, African American Literature.

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+ **McKeague, Ian W.,** Professor of Statistics, Ph.D. 1980, University of North Carolina. Fields: Probability Theory, Inference for Stochastic Processes, Statistical Communication Theory.
+ **McLaren, Peter G.,** Visiting Professor of Electrical Engineering, Ph.D. 1971, University of Dundee. Fields: Signal Processing Problems in Power System Measurement and Control, Power System Simulation, Off-line and Real-time, Optoelectronic Transducers for Power Systems, Voltage Surge Propagation in Large AC Motors, Power Applications of Superconductivity.
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+ **McRorie, Sally,** Dean of Visual Arts and Dance and Professor of Art Education, Ph.D. 1985, University of Kansas. Fields: Art Education, Aesthetics.
- **McWilliams, Ralph D.,** Service Professor of Mathematics, Ph.D. 1957, University of Tennessee. Fields: Functional Analysis: Weak Topologies in Banach Spaces.
+ **Megargee, Edwin I.,** Professor of Psychology, Ph.D. 1964, University of California at Berkeley. Fields: Aggression, Personality Assessment, Applications of Psychology to Crime, Delinquency and Criminal Justice.
+ **Meighan, Patrick J.,** Professor of Music, M.M. 1973, Michigan State University. Fields: Saxophone Performance, Woodwind Literature.
+ **Mele, Alfred Remen,** Werkmeister Professor of Philosophy, Ph.D. 1979, University of Michigan. Fields: Action Theory, Philosophy of Mind, Metaphysics, Ancient Greek Philosophy.
+ **Menchetti, Bruce M.,** Associate Professor of Special Education, Ph.D. 1987, University of Illinois at Urbana-Champaign. Fields: Secondary Education and Transitional Services, Community-Based Instruction and Curriculum Development, Ecological Assessment and Supported Employment.
+ **Meredith, Michael,** Professor of Biological Science, Ph.D. 1974, University of Pennsylvania. Fields: Sensory Physiology, Chemical Communication.
- **Messersmith, Mark L.,** Professor of Art, M.F.A. 1980, Indiana University. Field: Painting.
+ **Mesterton-Gibbons, Michael P.,** Professor of Mathematics, Ph.D. 1977, Oxford University. Fields: Game-Theoretic and Dynamic Modeling in Ecology, Economics and Natural Resource Management.
- **Meyer, James B.,** Associate Professor of Psychology, Ph.D. 1968, University of Wisconsin; J.D. 1983, Mercer School of Law. Fields: Law and Psychology, Psychological Ethics and Malpractice, Jury Selection, Mental Health Testimony.
- **Meyer-Base, Anke Meger,** Visiting Assistant Professor of Electrical Engineering, Ph.D. 1995, Darmstadt University. Fields: Digital Signal and Image Processing, Neural Networks, Theory of Nonlinear Systems.
- **Meyer-Base, Uwe Meger,** Visiting Assistant Professor of Electrical Engineering, Ph.D. 1995, Darmstadt University. Fields: Computer Arithmetic, ASIC and FPGA Synthesis, Digital Signal Processing.
+ **Miles, Rebecca,** Associate Professor of Urban and Regional Planning, Ph.D., Cornell. Fields: International Development Planning, Gender and Development.
+ **Miller, Thomas E.,** Associate Professor of Biological Science, Ph.D., Michigan State. Fields: Plant Evolutionary Biology and Community Ecology.
+ **Milton, Sande D.,** Professor of Educational Foundations and Policy Studies, Ph.D. 1978, Cornell University. Fields: Sociology and Politics of Education, Policy Studies, Educational Research, Africa.
+ **Mio, Washington,** Associate Professor of Math, Ph.D. 1984, Courant Institute-New York University. Fields: Geometric Topology, Topology of Manifolds, Knot Theory.
+ **Mistry, Anahita,** Assistant Professor of Nutrition, Food, and Exercise Sciences, Ph.D., University of Hyderabad. Fields: Neuroendocrine Regulation of Energy Balance, Nutrient-gene Interactions, Prevention of Genetic and Diet-induced Obesity, Nutrition Policy.
- **Mitchell, James,** Assistant Professor of French, Ph.D. 2001, Cornell University. Fields: Applied Linguistics, Second Language Acquisition, Romance Languages.
+ **Mitchell, Sarah,** Assistant Professor of Political Science, Ph.D. 1997, Michigan State University. Fields: International Relations, Political Methodology.
+ **Moerland, Timothy S.,** Professor of Biological Science, Ph.D., University of Maine. Fields: Energetics of Muscle Contraction, Temperature Adaption.
+ **Moffatt, Robert J.,** Chair and Professor of Nutrition, Food, and Exercise Science, Ph.D. 1985, University of Michigan. Fields: Exercise and Lipoprotein Metabolism, Cigarette Smoking and Cessation from Cigarette Smoking on Energy Balance and Lipoprotein Metabolism.
+ **Mondak, Jeffrey,** Associate Professor of Political Science, Ph.D. 1991, Indiana University, Fields: Political Cognition, Media, Public Opinion, Voting and Elections, Politics and Culture, and Political Methodology.
+ **Mondello, Mike,** Assistant Professor of Physical Education, Ph.D. 1999, University of Florida. Field: Sport Finance.
+ **Monkman, Karen,** Assistant Professor of International Development Education, Ph.D. 1997, University of Southern California. Fields: International, Comparative, and Developmental Education; Gender and Education, Sociocultural and Transnational Contexts of Learning, Nonformal Education and Community-based Learning, Qualitative Research Methodologies, Education in Latin America and Sub-Saharan Africa.
+ **Montgomery, Daniel J.,** Associate Professor of Communication, Ph.D. 1972, Washington University. Fields: Performance Management, Organizational Consulting, Professional Ethics.
+ **Montgomery, Maxine L.,** Associate Professor of English, Ph.D. 1986, University of Illinois. Fields: Twentieth–Century American Literature, African American Literature.
- **Moore, Carl,** Visiting Assistant Professor of Mechanical Engineering, Ph.D. 2001, Northwestern University. Fields: Human Robot Interaction, Robot Assisted Manufacturing and Design, Mobile Robotics, Intelligent Machine Design.
+ **Moore, Dennis D.,** Associate Professor of English, Ph.D., University of North Carolina, Chapel Hill. Fields: Early American Literature.
+ **Moore, James C.,** Associate Professor of Communication, Ph.D. 1968, The Florida State University. Fields: Interpersonal Communication, Echo Posturing Research.
+ **Moore, Mary Ann,** Professor of Textiles and Consumer Sciences, Ph.D. 1980, Florida State University. Fields: Textile Economics, Color Measurement, Colorfastness to Light and Weathering.
+ **Moore, Will**, Associate Professor of Political Science, Ph.D. 1991, University of Colorado-Boulder. Fields: International Relations, Political Conflict.
+ **Morales, Maria H.**, Associate Professor of Philosophy, Ph.D., University of Pennsylvania. Fields: Political Philosophy, Ethics, Philosophy of Law, Ancient Greek Philosophy, Feminism.
+ **Moreo, Adriana,** Professor of Physics, Ph.D., Instituto Balseiro at Argentina. Fields: Theoretical Physics, Condensed Matter, Particle Physics.
- **Morgan, Anthony,** Associate Professor of Dance, B.S. (Mechanical Engineering) 1973, Queens University; Diploma in Contemporary Dance 1976, London School of Contemporary Dance. Fields: Contemporary Dance Technique, Choreography, Performance.
+ **Morgan, Robert M.,** Professor of Educational Research, Ph.D. 1958, Ohio State University. Fields: International Education Development, Research Management.
+ **Morris, Richard J.,** Chair and Associate Professor of Communication Disorders, Ph.D., University of Florida. Fields: Communication and Aging, Voice Disorders, Physiologic Phonetics, Acoustic Phonetics, Anatomy and Physiology of Speech.
+ **Morton, Richard M.,** Associate Professor of Accounting, Ph.D. 1994, Pennsylvania. Fields: Empirical Financial Accounting.
+ **Mott, Joe L.,** Professor of Mathematics, Ph.D. 1963, Louisiana State University. Fields: Ideal Theory of Commutative Rings, Partially Ordered Abelian Groups.
+ **Moulton, William G.,** Professor of Physics, Ph.D. 1952, University of Illinois. Fields: Experimental Physics, Low-temperature Solid-state Physics, Electrical and Magnetic Properties of Thin Films, Superconductivity.
+ **Mtenga, Primus V.,** Associate Professor of Civil and Environmental Engineering, Ph.D., University of Wisconsin-Madison. Fields: Structural Engineering, Wood Structures, System Performance and Reliability.
+ **Mullis, Ann K.,** Associate Professor of Family and Child Sciences, Ph.D. 1978, Iowa State University. Fields: At-risk Children, Community Enhancement of Human Resources, Welfare Reform and Public Policy.
+ **Mullis, Ronald L.,** Professor of Family and Child Sciences, Ph.D. 1978, Iowa State University. Fields: Parent-Child Relationships, Adolescent Development, Social Cognition, Child Care.
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- **Munton, Peter,** Associate Professor and Associate Chair of Interior Design, M.A. 1968, North Dakota State University. Fields: Theatre Design, Hospitality Design, Creative Problem Solving.
- **Muscha, Colleen L.,** Professor of Theatre, M.F.A. 1978, New York University. Fields: USA, Costume Design.
- **Mussa, Renatus**, Assistant Professor of Civil and Environmental Engineering, Ph.D. 1996, Arizona State. Fields: Intelligent Transportation Systems, Highway Safety, Traffic Operations and Control.
- **Myers, Karen L.,** Associate Professor of Interior Design, M.S. 1979, Florida State University. Fields: Architectural and Design History.
- **Nahmias, Eddy,** Assistant Professor of Philosophy, Ph.D. 2001, Duke University. Fields: Philosophy of Mind, Philosophy of Psychology, Moral Psychology.
+ **Nasgaard, Roald,** Chair and Professor of Art, Ph.D. 1973, Institute of Fine Arts. Fields: Modern and Contemporay Art History and Criticism.

+ **Nast, Donald A.,** Chair and Associate Professor of Finance, Ph.D. 1975, Pennsylvania State University. Fields: Corporate Finance, Investments.
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+ **Nichols, Warren D.,** Professor of Mathematics, Ph.D. 1975, Chicago State University. Fields: Commutative Algebra, Hopf Algebras.
+ **Nicholson, Sharon E.,** Professor of Meteorology, Ph.D. 1976, University of Wisconsin. Fields: Physical and Dynamic Climatology, Tropical Meteorology, Climate Change, Remote Sensing.
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+ **Nnaji, Soronadi,** Visiting Professor of Civil and Environmental Engineering, Ph.D. 1981, University of Arizona. Fields: Water Resources Systems, Hydrology, Hydraulics, Computer Applications.
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+ **Nolder, Craig A.,** Associate Professor of Mathematics, Ph.D. 1985, University of Michigan. Fields: Complex Analysis and Quasiconformal Mappings.
+ **Norrbin, Stefan C.,** Professor of Economics, Ph.D., Arizona State. Fields: International Trade and Finance, Macroeconomics, Econometrics.
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• **Novinger, Phillip,** Associate Professor of Mathematics, Ph.D. 1968, University of Kentucky. Fields: Complex Analysis, Constructive Analysis.
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+ **Oberlin, Daniel M.,** Professor of Mathematics, Ph.D. 1974, University of Maryland. Fields: Harmonic Analysis of Groups, Banach Spaces of Analytic Functions.
+ **O'Brien, James J.,** Professor of Meteorology and Oceanography, Ph.D. 1966, Texas A&M University. Fields: Physical Oceanography, Dynamic Meteorology, Air-Sea Interaction and Remote Sensing of Winds over the Ocean.
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• **Ohazama, Tasuku,** Associate Professor and Graduate Coordinator, Interior Design, M.A. 1974, Cornell University. Field: Architecture.
+ **Ohlsson, Eric P.,** Professor of Music, B.M.Ed. 1980, Ohio State University. Fields: Oboe Performance, Woodwind Literature.
+ **Okoli, Okenua,** Assistant Professor of Industrial Engineering, Ph.D. 1996, University of Warwick. Fields: Manufacture and Characterization of Composite Materials, Manufacturing Engineering and Strategy, Management of Supply Chains.
+ **Oldson, William O.,** Professor of History, Ph.D. 1970, Indiana University. Fields: Balkans, Hapsburg Monarchy, Russia.
• **Olina, Zane,** Visiting Assistant Professor of Instrcutional Systems, Ph.D. 2002, Arizona State University. Fields: Learning and Evaluation in Corporate Training and Nonprofit Organizations.
+ **Olsen, Dale A.,** Professor of Music, Ph.D. 1973, University of California at Los Angeles. Field: Ethnomusicology.
+ **Olsen, Stanford D.,** Lucille P. and Elbert B. Shelfer Eminent Scholar in Music, Professor of Music, Artist Diploma in Opera, University of Cincinnati-Conservatory of Music. Fields: Voice/Opera
+ **Oosterhof, Albert C.,** Professor of Educational Research, Ph.D. 1972, University of Kansas. Fields: Application of Measurement Procedures at the Classroom Level, Microcomputer Applications.
• **Opel, Andy,** Assistant Professor of Communication, Ph.D. 2001, University of North Carolina at Chapel Hill. Fields: Media Activism and Social Movements, Environment and Consumer Culture, Documentary and Non-fiction Narrative.
+ **Orcutt, James D.,** Professor of Sociology, Ph.D. 1973, University of Minnesota. Fields: Deviance, Social Psychology, Sociology of Drugs and Alcohol.
+ **O'Rourke, James,** Professor of English, Ph.D., Washington. Fields: British Romanticism, Shakespeare, Literary Theory.
+ **Ortiz-Taylor, Sheila L.**, Professor of English, Ph.D. 1973, University of California at Los Angeles. Fields: Creative Writing, Womens Literature, Eighteenth-Century British Fiction.
+ **Oseroff, Andrew B.**, Associate Professor of Special Education, Ed.D. 1970, University of Pittsburgh. Fields: Teacher Education, Achievement of the Mildly Handicapped, Administration and Supervision in Special Education.
+ **Osteryoung, Jerome S.,** Professor of Finance, Ph.D. 1971, Georgia State University. Field: Corporate Finance.
+ **O'Sullivan, Patrick M.,** Professor of Geography, Ph.D. 1967, London School of Economics. Fields: Military, Political, Europe, Britain, Ireland.
+ **Ouimet, Charles,** Professor of Biomedical Sciences, Medicine, Ph.D. 1980, Brown University. Fields: Functional Neuroanatomy, Transmitter Agents and Receptors, Limbic System, Neuronal Phosphoproteins.
+ **Outlaw, William H., Jr.,** Professor of Biological Science, Ph.D. 1974, University of Georgia. Field: Plant Physiology.
• **Overby, Jeffrey W.,** Assistant Professor of Marketing, Ph.D. 2000, University of Tennessee. Fields: Customer Value, Satisfaction and Service, Quality Determination and Measurement, Cross-cultural Marketing and Segmentation, Multinational Business Issues.
+ **Overton, Michael J.,** Associate Professor of Nutrition, Food, and Exercise Science, Ph.D., University of Iowa. Fields: Cardiovascular and Sympathoadrenal Regulation During Exercise, Exercise Training and Hypertension.
+ **Owens, Joseph F., III,** Professor of Physics, Ph.D. 1973, Tufts University. Fields: Theoretical Physics; Elementary Particle Theory.
• **Owusu, Yaw A.,** Associate Professor of Industrial Engineering, Ph.D., Pennsylvania State University. Fields: Manufacturing Processes, Material Forming.
+ **Padavic, Irene,** Associate Professor of Sociology, Ph.D. 1987, University of Michigan. Fields: Gender, Work, Social Stratification, Family.
+ **Palanki, Srinivas,** Associate Professor of Chemical Engineering, Ph.D. 1992, University of Michigan. Fields: Developing Process Analysis, Optimization and Control of Batch Reactors Research.
+ **Palmer, Barbara C.,** Professor of Educational Theory and Practice, Ph.D. 1972, The Florida State University. Fields: Diagnosis/Correction of Reading Disabilities, Adult Literacy.
+ **Panton, Lynn,** Assistant Professor of Movement Sciences, Ph.D. 1993, University of Florida. Fields: Function in Aging, Strength Training and the Effects on the Physiological Measurements of Strength, Blood Pressure, Cholesterol, Body Composition, and Functional Outcomes of Healthy Elderly Adults and Chronically Diseased Populations.
+ **Papagiannis, George J.,** Professor of Educational Foundations and Policy Studies, Ph.D. 1977, Stanford University. Fields: Sociology of Education and Development, Microcomputers in Education, Organizational Development, Participatory Approaches in Educational Planning, Evaluation and Research, Policy Studies; Southeast Asia and Africa.
+ **Pappamihiel, Eleni,** Assistant Professor of ESOL, Ph.D. 1999, University of Texas at Austin. Fields: Affective Factors in Second Language Acquisition, Second Language Assessment, ESL in the Mainstream.
+ **Paradice, David B.,** Chair and Professor of Management, Ph.D. 1986, Texas Tech. Fields: Application of Information Technologies in Support of Managerial Problem Formation and Decision-making Process, Philosophical Bases for Organizational Knowledge Development and Management, Influence of Information Systems Technology on Ethical Decision-making Processes
+ **Pargman, David,** Professor of Educational Research, Ph.D. 1966, New York University. Fields: Stress and Motor Performance, Psychological Aspects of Exercise and Sport.
+ **Parker, Glenn R.,** Professor of Political Science, Ph.D. 1973, University of California at Santa Barbara. Fields: American Politics, Legislatures, Public Opinion, Political Economy.
+ **Parker, Suzanne L.,** Associate Professor of Political Science, Ph.D. 1986, The Florida State University. Fields: American Politics, Public Opinion, Research Methods.
+ **Parker, William C.,** Associate Chair and Associate Professor of Geological Sciences, Ph.D. 1983, University of Chicago. Fields: Marine Paleoecology, Carbonate Petrology.
+ **Parkinson, William A.,** Assistant Professor of Anthropology, Ph.D. 1999, University of Michigan. Fields: Prehistoric Archaeology of Central/Eastern Europe and the Balkans.
• **Pashupati, Kartik,** Assistant Professor of Communication, Ph.D. 1996, Michigan State University. Fields: Advertising, Integrated Marketing Communication, Media Planning, Internet Communication and Advertising, Internet Policy, International Television Policy, Research Methods, Communication Theory.
• **Patenaude, Elizabeth**, Chair and Professor of Dance, M.F.A. 1976, University of North Carolina at Greensboro. Fields: Contemporary Dance Technique and Choreography.
• **Paterson, Jeffrey S.**, Associate Professor of Accounting, Ph.D. 1995, University of Georgia. Field: Tax.
Patrick, Graham A., Professor of Biomedical Sciences, Medicine, Ph.D. 1973, University of North Carolina at Chapel Hill. Field: Pharmacology.
• **Patton, Corrine**, Assistant Professor of Religion, Ph.D., Yale. Fields: Ancient Near Eastern Studies, Hebrew Scriptures.
Payer, Andrew F., Professor of Biomedical Sciences, Medicine, Ph.D. 1973, Loyola University. Field: Human Anatomy.
• **Pekurny, Robert**, Assistant Professor of Communications, Ph.D. 1977, University of Minnesota. Fields: Screenwriting, Television Production, Television Industry Studies.
• **Perpener, John O., III,** Associate Professor of Dance, Ph.D. 1992, New York University. Fields: Dance History and Theory Research.
+ **Perrewe, Pamela L.,** Associate Dean, College of Business and Professor of Management, Ph.D. 1985, University of Nebraska. Fields: Organization Behavior, Job Stress, Task Design.
+ **Perry, Reginald J.,** Chair and Professor of Electrical and Computer Engineering, Ph.D. 1989, Georgia Institute of Technology. Fields: CMOS Digital and Analog Circuit Design, DRAM/SRAM Memory Cell Development, Radiation Effects in DRAM/SRAM Arrays, MOS Device Design and Modeling.
• **Perry, Robin,** Visiting Assistant Professor of Social Work, Ph.D. 1999, University of California at Berkeley. Fields: Program Evaluation, Survey Research, History of Social Welfare Problems and Institutions (Public Social Services, Child Welfare and Poverty), Domestic Violence, philosophy of Science and Social Science, Training and Professional Development.
+ **Peters, Elizabeth H.,** Associate Professor of Anthropology, Ph.D. 1982, University of Florida. Fields: Physical Anthropology, Primatology, Communication, Behavioral Evolution.
+ **Peters, Michael H.,** Chair and Professor of Chemical Engineering, and Professor of Biomedical Sciences, Medicine, Ph.D. 1981, Ohio State University. Fields: Aerosol Particle Transport, Fluid-Particle Transport Phenomena, Multiphase Processing.
+ **Peterson, David R.,** Professor of Finance, Ph.D. 1981, University of North Carolina at Chapel Hill. Field: Investments.
+ **Peterson, Gary W.,** Professor of Human Services and Studies, and Associate Dean, College of Education, Ph.D. 1970, Duke University. Fields: Personality Assessment, Cognitive Development, Consulting.
+ **Peterson, Janet,** Professor of Mathematics, Ph.D. 1981, University of Tennessee at Knoxville.
+ **Peterson, Pamela P.,** Professor of Finance, Ph.D. 1981, University of North Carolina at Chapel Hill. Fields: Corporate Finance.
• **Peterson, William F.,** Associate Professor of Music, M.M. 1987, Eastman School of Music. Fields: Composition, Jazz Keyboard Performance.
+ **Petrovich, Fred L.,** Professor of Physics, Ph.D. 1970, Michigan State University. Fields: Theoretical Physics; Nuclear Structure, Reaction Theory, Using Realistic Effective Interactions.
• **Pfaff, Christopher A.,** Associate Professor of Classics, Ph.D. 1992, Institute of Fine Arts. Fields: Greek Art and Archaeology.
+ **Pfeffer, Richard L.,** Professor of Meteorology, Ph.D. 1957, Massachusetts Institute of Technology. Fields: Global Atmospheric Circulation, Hurricane Dynamics, Computer and Laboratory Modeling of Geophysical Fluid Flows.
• **Phillips, Patricia H.,** Associate Professor of Dance, M.S., Florida State University. Field: Reconstruction Notation.
+ **Piazza, Carolyn L.**, Associate Professor of Educational Theory and Practice, Ph.D. 1981, University of Pittsburgh. Fields: Language and Literacy Education, Written Composition.
• **Picart, Caroline Joan,** Assistant Professor of English, Ph.D. 1996, Penn State University. Fields: Literature and Philosophy, Film, Critical Theory and Women's Studies.
+ **Piekarewicz, Jorge,** Associate Professor of Physics, Ph.D. 1985, University of Pennsylvania. Fields: Theoretical and Computational Nuclear Physics.
+ **Piersol, Jon R.**, Professor and Dean, School of Music, Ph.D. 1972, University of Iowa. Fields: Wind Literature, Administration.

- **Pietralunga, Mark,** Chair and Professor of Modern Languages, Ph.D. 1983, University of California at Berkeley. Field: Twentieth – century Italian Novel.
+ **Pignatiello, Joe**, Associate Professor of Industrial Engineering, Ph.D. 1982, Ohio State University. Field: Industrial Engineering.
+ **Ping, Wie-chou Virgil**, Professor of Civil and Environmental Engineering, Ph.D., University of Texas-Austin. Fields: Materials, Pavement and Transportation Engineering.
- **Pitts, James E.**, Professor of Management Information Sciences, and Director, International Programs, Ph.D. 1968, University of Kentucky. Fields: Quantitative Methods, Managerial Economics.
- **Plant, Ashby**, Assistant Professor of Psychology, Ph.D. 2000, University of Wisconsin. Fields: Social Psychology with a Focus on Prejudice and Stereotyping.
+ **Platt, Elizabeth J.,** Associate Professor of Curriculum and Instruction, Ph.D., University of Illinois. Fields: Multilingual/Multicultural Education.
+ **Poey, Delia M.,** Assistant Professor of Modern Languages, Ph.D. 1996, Louisiana State University. Field: Comparative Literature.
+ **Pohl, Mary E.,** Professor of Anthropology, Ph.D. 1977, Harvard University. Fields: Mesoamerican Archaeology, Ethnozoology.
- **Pompper, Donnalyn,** Associate Professor of Communication, Ph.D. 2001, Temple University. Fields: Social Risk, Health Communication, Mass Communication, Popular Culture, Media History.
- **Ponder, Purvis E.,** Associate Professor of Special Education, M.A. 1963, Western Michigan University. Fields: Orientation and Mobility of the Blind, Sensory Development, Physical Impairments.
- **Pool, Amy Bunger,** Assistant Professor of Criminology and Criminal Justice, Ph.D. 1996, George Mason University. Fields: Public Policy; Public Law; Sociology of Law.
+ **Pope, Jerrold,** Associate Professor of Music, D.M.A. 1992, Rutgers. Field: Voice.
- **Portman, Richard,** Distinguished Film Maker in Residence, Motion Picture, Television and Recording Arts. Field: Film Sound.
  Posner, Philip, Visiting Professor of Biomedical Sciences, Medicine, Ph.D. 1972, State University of New York Downstate Medical Center. Field: Physiology.
- **Poster, Carol,** Assistant Professor of English, Ph.D. 1994, University of Missouri. Fields: History and Theory of Rhetoric, Poetry Translations (from Classical Greek, Latin and French), Poetry, Non-fiction.
  Powell, David F., Associate Professor of Law, J.D. 1972, University of Texas. Fields: Property, Gratuitous Transfers, Estate and Gift Tax.
+ **Prasad, Kislaya,** Associate Professor of Economics, Ph.D., Syracuse. Fields: Microeconomics, Econometrics.
+ **Presmeg, Norma C.,** Associate Professor of Curriculum and Instruction, Ph.D. 1985, University of Cambridge, England. Fields: Mathematics Education.
+ **Prevatt, Frances,** Associate Professor of School Psychology, Ph.D. 1985, University of Virginia. Fields: School Psychology, Learning Disabilities.
+ **Proctor, Briley,** Visiting Assistant Professor of School Psychology, Ph.D. 1999, University of Florida. Fields: Learning Disabilities in College Students and Adults; Psycho-educational Assessment; Academic Interventions.
+ **Prosper, Harrison B.**, Professor of Physics, Ph.D., Manchester, Britain. Fields: Experimental Physics, Particle Physics.
+ **Pullen, Daniel J.D.,** Associate Professor of Classics, Ph.D. 1985, Indiana University. Fields: Classical Archaeology and Bronze Age Archaeology.
- **Punter, Melaine**, Assistant Professor of Music Performance, B.M. 1970, Manhattan School of Music and Art. Field: Double Bass.
+ **Quadagno, Jill B.,** Professor of Sociology, and Mildred and Claude Pepper Eminent Scholar Chair, Social Gerontology, Ph.D. 1976, University of Kansas. Fields: Aging, Historical Sociology, Political Economy.
- **Quarterman, Jerome,** Associate Professor of Physical Education, Ph.D., Ohio State University. Fields: Organizational Behavior.
+ **Quine, John R.,** Professor of Mathematics, Ph.D. 1971, University of Michigan. Fields: Complex Analysis, Geometric Function Theory.
- **Rackley, Sandra W.,** Associate Professor of Communication, and Dean, Undergraduate Studies, Ph.D. 1975, The Florida State University. Fields: Intercultural, Interpersonal, and Public Address.
- **Ragheb, Mounir,** Professor of Human Services and Studies, Ph.D. 1975, University of Illinois. Fields: Social Psychology of Leisure Behavior, Research Methods, Philosophy.
- **Ralstin, Laura A.,** Assistant Professor of Communication, Ph.D. 1999, University of Alabama. Fields: Persuasion and Attitude Structure, International Public Relations, Crisis Communication, Organizational Image.
+ **Ralston, Penny A.**, Dean, College of Human Sciences and Professor of Family and Consumer Sciences Education, Ph.D. 1978, University of Illinois. Fields: Community-based programs for Older Adults; Program Development in Higher Education.
- **Raman, Pushkala,** Assistant Professor of Marketing, Ph.D. 2000, Texas A&M University. Fields: Consumer Behavior, Marketing Research.
+ **Raney, Arthur A.,** Assistant Professor of Communication, Ph.D. 1998, University of Alabama. Fields: Mass Communication Processes and Effect, Media and Society, Entertainment Theory, Sports and Media, Communication Theory and Research Methods.
+ **Rankins, Jenice,** Associate Professor of Nutrition, Food, and Exercise Science, Ed.D. 1980, Columbia University. Fields: Nutrition Education Interventions in the Community, Interactions of Gender and Nutrition in International Development, Global Education (focus on nutrition resources management).
+ **Rashotte, Michael,** Professor of Psychology, Ph.D. 1966, University of Toronto. Fields: Thermoregulatory, Metabolic, and Feeding Reactions of Pigeons in Foraging Simulations; Feeding Behavior; Learning with Regard to Feeding and Thermoregulation.
+ **Rasmussen, David W.,** Dean of Social Sciences, Program Director and Professor of Economics, and Research Associate, Policy Science Program, Ph.D. 1969, Washington University. Fields: Urban Economics, Labor Economics.
+ **Ratliffe, Thomas A.,** Associate Professor of Physical Education, Ed.D., Georgia. Fields: Administration and Professional Preparation.
+ **Rawling, J. Piers,** Associate Professor of Philosophy, Ph.D. 1989, University of California at Berkeley. Fields: Decision and Game Theory, Ethics, Logic.
+ **Ray, Peter S.,** Professor of Meteorology, Ph.D. 1973, Florida State University. Fields: Remote Sensing, Numerical Modeling of Mesoscale Processes, Severe Storms and Cloud Dynamics.
+ **Rayburn, Jay D.,** Associate Professor of Communication, Ph.D. 1977, Florida State University. Fields: Public Relations, Uses and Gratifications of Mass Media, Audience Analysis, Media Effects, Mass Media Law.
+ **Readdick, Christine A.,** Associate Professor of Family and Child Sciences, M.S. 1988, Florida State University. Fields: Early Childhood/Adolescent Development, Early Childhood Pedagogy, Sibling/Non-Sibling Caregiving.
+ **Reardon, Robert C.,** Professor of Human Services and Studies, and Director, Career Placement Center, Ph.D. 1968, Florida State University. Fields: Development and Evaluation of Life Career Planning Programs for Youth and Adults.
+ **Ree, Joe J.,** Professor of Modern Languages and Linguistics, Ph.D. 1969, Indiana University. Fields: General and Oriental Linguistics, Japanese, Korean.
+ **Reeves, Robert H.,** Associate Chair and Associate Professor of Biological Science, Ph.D. 1969, New York University. Fields: Bacterial and Phage Genetics, RNA Structure and Function, Translational Suppression.
+ **Rehder, Ernest C.,** Associate Professor of Modern Languages and Linguistics, Ph.D. 1971, University of Florida. Fields: Spanish, Portuguese Language and Literature.
+ **Rehm, Marsha Lynn,** Associate Professor of Family and Child Sciences, Ph.D. 1987, University of Minnesota. Fields: Family and Consumer Sciences Education, Aesthetic Aspects of Family Life, Vocational Development.
+ **Reid, Lori,** Assistant Professor of Sociology, Ph.D. 1997, University of Arizona. Fields: Sex and Gender, Work and Labor Markets, Race/Class/Gender.
+ **Reid, Sue Titus,** Professor of Public Administration and Policy, and Director of Development, College of Social Sciences, Ph.D. 1965, University of Missouri-Columbia; J.D. 1972, University of Iowa College of Law. Fields: Torts, Criminology, Criminal Justice.
+ **Reimers, Jane L.,** Professor of Accounting, Ph.D. 1986, University of Michigan. Field: Cost Accounting.
+ **Reina, Laura,** Assistant Professor of Physics, Ph.D. 1992, International School for Advanced Studies. Fields: Phenomenoly of Particle Physics.
+ **Reiser, Robert A.,** Professor of Educational Research, Ph.D. 1975, Arizona State University. Fields: Individualized Instruction, Mastery Learning, Media Research.
- **Reynaud, Cecile**, Assistant in Physical Education, Ph.D. 1998, Florida State University. Fields: Sport Administration, Coaching.
+ **Reynolds, John**, Assistant Professor of Sociology, Ph.D. 1997, Ohio State University. Fields: Social Stratification, Research Methodology, Stats, Medical Sociology, Multiple Regression.
+ **Riccardi, Gregory A.,** Professor of Computer Science, Ph.D. 1980, State University of New York. Fields: Supercomputer Programming, Parallel Processing, Software Engineering, Operating Systems.
+ **Rice, Diana,** Assistant Professor of Elementary Education, Ph.D. 1990, Indiana University. Field: Elementary Science Education.
- **Richard, Valliere T.,** Associate Professor of Motion Picture, Television, and Recording Arts, Ph.D., Florida State University. Fields: Computer Animation History, Screenwriting, Documentary Film, African American Artists, African American History.
+ **Richardson, Joe M.,** Professor of History, Ph.D. 1963, Florida State University. Fields: United States Reconstruction, African American History.
- **Richey, Michael M.,** Professor of Theatre, Ph.D. 1975, Florida State University. Field: Acting.
+ **Rikvold, Per Arne,** Professor of Physics, Ph.D. 1983, Temple University. Fields: Theoretical Physics; Condensed-matter Physics, Surface and Interface Science, Computational Physics.
+ **Riley, Mark,** Professor of Physics, Ph.D., University of Liverpool. Fields: Experimental Physics, Nuclear Structure Physics.
+ **Rill, Randolph,** Professor of Biomedical Sciences, Medicine, Ph.D. 1970, Northwestern University. Fields: Physical Biochemistry, DNA Structure and Function, DNA/Small Molecule Interactions, Bioanalytical Chemistry.
+ **Riordan, George T.,** Academic Administrator, Music, D.M., Florida State University. Fields: Woodwind Performance/Literature, Arts Administration.
+ **Ripley, C. Peter,** Professor of History, Ph.D. 1973, Florida State University. Fields: United States Civil War, Reconstruction, African American History.
+ **Robbins, Jane B.**, Dean and Professor of Information Studies, Ph.D., University of Maryland. Fields: Education for Library and Information Specialties, Research Methods and Statistics, Management or Administration and Public Libraries.
- **Roberson, Keith,** Assistant Professor of Art, M.F.A. 1996, University of Maryland. Fields: Digital Arts, Interactive Sculpture, Virtual Reality, Digital Video.
+ **Roberts, Rodney G.,** Associate Professor of Electrical and Computer Engineering, Ph.D. 1992, Purdue University. Fields: Control Systems and Robotics.
+ **Roberts, Thomas M.,** Professor and Chair of Biological Science, Ph.D. 1976, University of Notre Dame. Field: Cell Biology.
+ **Robson, Donald,** Professor of Physics, Ph.D. 1963, Melbourne. Fields: Theoretical Physics, Interface between High-energy and Nuclear Theory.
- **Roche, James W.,** Professor of Studio Art, M.F.A. 1970, University of Dallas. Field: Sculpture.
+ **Rollin, Stephen A.,** Professor of Human Services and Studies, Ed.D. 1970, University of Massachusetts. Fields: Counseling Research and Grantsmanship, Administration and Health Psychology.
- **Roman, Mary Brigid,** Associate Professor of Music, M.M. 1968, Eastman School of Music. Fields: Harp Performance, Class Piano.
- **Romanchuk, Robert,** Assistant Professor of Modern Languages, Ph.D. 1999, University of California at Los Angeles. Fields: Early Slavic and Byzantine Literature and Culture, Monastic Culture, Medieval Hermeneutics.
+ **Rosal, Marcia,** Acting Chair and Professor of Art Education, Ph.D. 1986, University of Queensland. Fields: Efficacy of Art Therapy, Use of Art Therapy with Various Populations.
+ **Rose, Patricia,** Associate Professor of Art History, Ph.D. 1973, Columbia University. Fields: Italian and Northern Renaissance Art.
- **Rosenbaum, L. Penny**, Assistant Professor in Visual Disabilities, Ph.D. 1997, University of Arizona. Fields: Visual Impairments; Adolescence and Social Issues, Personal Preparation.
+ **Roux, Kenneth H.,** Professor of Biological Science, Ph.D. 1974, Tulane University. Fields: Molecular Immunology, Immunogenetics, Immunochemistry.
+ **Rowe, Anne E.,** Dean of the Faculties and Professor of English, Ph.D. 1973, University of North Carolina at Chapel Hill. Field: Literature of the American South.
- **Rubini, Gail,** Associate Professor of Art, M.F.A. 1975, Rhode Island School of Design; M.B.A. 1981, University of Illinois. Fields: Photography, Glass, Business.
  Ruhl, John B., LL.M., Professor of Law, George Washington; J.D., Virginia.
- **Ruiz, Marilyn O.,** Assistant Professor of Geography, Ph.D. 1995, University of Florida. Fields: Geographical Information Studies, Medical Geography.
+ **Ruppert, Peter C.,** Professor of Modern Languages and Linguistics, Ph.D. 1972, University of Iowa. Fields: German and Comparative Literature, Utopian Studies, European Cinema, Twentieth – Century Literature.
+ **Ruscher, Paul H.,** Associate Professor of Meteorology, Ph.D. 1987, Oregon State University. Fields: Synoptic and Mesometeorology, Boundary Layer Processes.
+ **Ruse, Michael,** Visiting Professor of Philosophy, Ph.D. 1970, University of Bristol. Fields: Philosophy of Biology (especially Darwinism), Ethics, History and Philosophy of Science.
- **Rutkovsky, Paul,** Associate Professor of Studio Art, M.F.A. 1972, University of Illinois. Field: Electronic Media.

- **Rutledge, Scott E.,** Associate Professor of Social Work, Ph.D. 2001, University of Washington. Fields: HIV Prevention Intervention with Individuals, Families and Communities, Social Determinants of Health, Contexualizing Sexuality.
+ **Ryan, Pamela L.,** Associate Professor of Music, M.A. 1983, Brooklyn College Conservatory of Music. Fields: Viola Performance, String Pedagogy and Literature.
- **Ryan, Scott D.,** Assistant Professor of Social Work, Ph.D. 2000, Case Western Reserve University. Fields: Child Welfare/Adoptions, Impact of AIDS on the Families, Play Therapy
+ **Safron, Sanford A.,** Professor of Chemistry, Ph.D. 1969, Harvard University. Fields: Dynamics of Chemical Reactions, Models of Chemical Reactions, Dynamics of Crystal Surfaces, He Atom-Surface Scattering Experiments.
+ **Saladin, Linda A.,** Associate Professor of English, Ph.D. 1985, University of California at Irvine. Fields: Literary Theory, Gender Studies.
- **Salmon, Tim,** Assistant Professor of Economics, Ph.D. 1999, John Hopkins. Fields: Game Theory, Auction Theory, Experimental Economics.
+ **Saltiel, Jack,** Professor of Chemistry, Ph.D. 1964, California Institute of Technology. Fields: Photochemistry of Organic Molecules, Elucidation of the Mechanisms of Photochemical Reactions by Chemical and Spectroscopic Means.
+ **Sampson, James P., Jr.,** Professor of Human Services and Studies, Ph.D. 1977, University of Florida. Fields: Computer Applications in Counseling, Career Decision-making and Career Services.
+ **Sandahl, Carrie,** Assistant Professor of Theatre, Ph.D. 1997, University of Wisconsin at Madison. Fields: Feminism, Postmodernism, Disability Studies, Cultrual Studies, Nineteenth – century Popular Performance.
- **Sandifer, James R.,** Associate Professor of Dance, B.A. 1982, University of Southern Mississippi. Fields: Dance Theatre Production and Design.
+ **Sandon, Leo**, Professor of Religion, Ph.D. 1971, Boston University. Fields: Religion in America, Ethics and Aging Policy, Western Religious Thought, American Intellectual History.
+ **Sapolsky, Barry S.**, Professor of Communication, Ph.D. 1977, Indiana University. Fields: New Communication and Information Technologies, Survey Research, Mass Communication Theory and Effects.
+ **Sass, Tim R.,** Associate Professor of Economics, Ph.D., University of Washington. Fields: Microeconomics, Industrial Organizations, Public Choice.
+ **Sathe, Shridhar,** Professor of Nutrition, Food, and Exercise Sciences, Ph.D. 1981, Utah State University. Fields: Physicochemical and Nutritional Aspects of Food Chemistry with Emphasis in Protein Biochemistry.
+ **Savitsky, Basil,** Assistant Professor of Geography, Ph.D. 1995, Clemson University. Fields: Remote Sensing, Geographical Information Systems, Resource Conservation, Information Politics, the Future.
- **Scheffers, Marten,** Assistant Professor of Psychology, Ph.D. 1999, University of Illinois. Field: Cognitive Neuroscience of Executive Control.
+ **Schlagenhauf, Donald**, Brim Eminent Scholar, Professor of Economics, Ph.D. 1977, University of Illinois. Fields: Macroeconomics, Applied Economics and Forecasting, International Monetary Theory and Policy.
+ **Schlenoff, Joseph**, Professor of Chemistry, Ph.D. 1986, University of Massachusetts, Amherst. Fields: Synthesis and Characterization of Electrically Conductive Polymers and Ceramics, Electrochemical Polymerization Properties of Superconducting Oxides.
+ **Schlottmann, Pedro U. J.,** Professor of Physics, Ph.D., Munich. Field: Theoretical Condensed Matter Physics. .
+ **Schmeeckle, Mark W.,** Assistant Professor of Geological Sciences, Ph.D. 1998, University of Colorado. Fields: Hydrology, Sediment Transport.
+ **Schmertmann, Carl,** Associate Professor of Economics, Ph.D., University of California at Berkeley. Field: Demography.
+ **Schneider-Muntau, Hans J.,** Professor of Mechanical Engineering and Associate Director, National High Magnetic Field Laboratory, Ph.D., Stuttgart.
+ **Scholz, John T.,** Francis Eppes Professor of Political Science, Ph.D. 1977, University of California at Berkeley. Fields: Public Policy and Adminstration, Political Economy, Governance.
- **Schrader, Linda,** Assistant Professor of Research and Evaluation, Ph.D. 1992, Florida State University. Fields: Program Evaluation, Qualitative Methods, Service Learning.
+ **Schrieffer, John R.,** Professor of Physics, Ph.D., University of Illinois. Fields: Theoretical Physics, Condensed Matter, Many-body Theory, Superconductivity.
- **Schrock, Doug,** Assistant Professor of Sociology, Ph.D. 2001, North Carolina State University. Fields: Emotions, Race/Class/Gender, Qualitative Methodology.

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+ **Schwartz, Daniel G.,** Associate Professor of Computer Science, Ph.D. 1981, Portland State University. Fields: Programming Languages, Models of Human Reasoning, Logic Programming, Expert Systems.
+ **Schwartz, Justin,** Associate Professor of Mechanical Engineering, and Associate Program Director, NHMFL, Ph.D., Massachusetts Institute of Technology. Fields: Magnetic Engineering, Superconductors, Bulk Processing, Fluxpinning Mechanisms and Irradiation Effects, Nuclear Engineering.
+ **Schwartz, Martin A.,** Professor of Chemistry, Ph.D. 1965, Stanford University. Fields: Organic Synthesis, Synthesis, Biogenetic-type Syntheses of Natural Products, Synthesis of Enzyme Inhibitors.
+ **Schwartz, Robert A.**, Associate Professor of Higher Education, Ph.D. 1990, Indiana University. Fields: Higher Education, Student Affairs.
+ **Scott, Elton,** Associate Professor of Finance, D.B.A. 1974, The Florida State University. Fields: Investments, Quantitative Methods.
+ **Scott-Simmons, Diana**, Professor of Educational Theory and Practice, Ed.D. 1973, Ball State University. Fields: Microcomputers and Reading, Reading Diagnosis and Correction.
- **Seaton, Gayle,** Professor of Music, D.M. 1985, Florida State University. Field: Music Theatre.
+ **Seaton, S. Douglass,** Professor of Music, Ph.D. 1977, Columbia University. Fields: Musicology, Music Literature.

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+ **Seppala, Mika K.**, Professor of Mathematics, Ph.D. 1978, Helsinki. Fields: Symbolic Computation; Analytic and Algebraic Geometry.
+ **Serow, William,** Professor of Economics, and Director, Center for Demography, Ph.D. 1972, Duke University. Field: Economic Demography.
+ **Sethuraman, Jayaram,** Professor of Statistics, Ph.D. 1962, Indian Statistical Institute. Fields: Probability, Stochastic Processes, Mathematical Statistics, Statistical Inference, Reliability, Bayesian Inference, Statistical Mechanics, Pattern Analysis.
- **Shaftel, Matthew R.,** Assistant Professor of Music Theory, Ph.D. 2000, Yale University. Field: Music Theory.
+ **Shaheen, Shahid A.,** Associate Professor of Physics, Ph.D. 1985, Ruhr-Bochum. Fields: Experimental Physics, Superconductivity, Magnetism, Materials Science.
+ **Shargel, Emanuel I.,** Associate Professor of Educational Foundations and Policy Studies, Ph.D. 1971, Cornell University. Fields: Philosophy of Education, Social Philosophy and Educational Practice, John Dewey.
+ **Shaw, Kenneth,** Associate Professor of Curriculum and Instruction, Ed.D. 1989, University of Georgia. Field: Mathematics Education.
+ **Shellahamer, Bentley R.,** Professor and Assistant Dean, School of Music, Ph.D. 1984, Ohio State University. Fields: Music Education, Administration.

  Shepherd, Lois L., Associate Professor of Law, J.D. 1987. Yale. Field: Jurisprudence.
+ **Shields, William L.,** Professor of Mechanical Engineering, Ph.D., Stanford University. Fields: Design and Systems Analysis.
+ **Shih, Chiang,** Chair and Professor of Mechanical Engineering, Ph.D., University of Southern California. Fields: Unsteady Aerodynamics, Turbulent Shear Flows, Laser Diagnostics, Instrumentation in Fluid Mechanics.
- **Shim, Wonsik,** Assistant Professor of Information Studies, Ph.D. 1999, Rutgers University. Fields: Assessment of Information Systems (use, benefits, and impacts), User Information Seeking Behaviors, Information Technology with Library Applications, Techniques of Information Retrieval.
- **Shinn, Christopher A.,** Assistant Professor of English, Ph.D. 2000, University of California at Santa Cruz. Fields: Asian American, African American, and Latino/-a Literatures, Cultural and Postcolonial Studies, Critical Race Theory.
+ **Showalter, Michael J.,** Professor of Marketing, Ph.D. 1976, Ohio State University. Fields: Operations Management, Management Science, Materials Management.
- **Sias, Richard J.,** Professor of Dance, ISTD, ATC 1964; Cecchetti, Imperial Society of Teachers of Dancing. Fields: Ballet Technique, Ballet Repertory, Choreography.
- **Sickinger, James,** Assistant Professor of Classics, Ph.D., Brown University. Fields: History, Literature and Oratory of Athenian Society, 500-300 BCE.
- **Siebert, Darcy,** Assistant Professor of Social Work, M.S.W. 1992, University of North Carolina at Chapel Hill. Fields: Professional Issues, Social Work Services in the Workplace, Technology in Social Work Practice and Research, Alcohol and Other Drug Use, Role Identity Theory.
+ **Simons, Fred O.,** Professor of Electrical and Computer Engineering, Ph.D. 1965, University of Florida. Fields: Digital Signal Processing, Computer Processing Optimizations, Digital Control Applications, Optimizing Algorithms and Processors for Engineering Applications.
- **Simotes, Anthony,** Associate Professor of Theatre, M.F.S. 1976, New York University. Fields: Acting, Stage Lighting and Directing.
+ **Simpson, James**, Associate Professor of Industrial Engineering, Ph.D. 1995, Arizona State University. Fields: Applied Probability and Statistics, Operations Research, Produciton and Operations Management, Simulation Modeling and Analysis, Quality and Reliability Engineering, Quality Management.
- **Singer, Evelyn T.**, Professor, School of Nursing, Ph.D. 1971, Marquette University. Fields: Psychology/Mental Health Nursing, Administration.
+ **Singh, Bawa Satinder,** Professor of History, Ph.D. 1966, University of Wisconsin. Field: India.
+ **Sinke, Suzanne M.,** Associate Professor of History, Ph.D. 1993, University of Minnesota. Fields: Immigration, Migration, Women's History.
+ **Sirmans, George Stacy,** Professor of Risk Management/ Insurance and Real Estate, Ph.D., University of Georgia. Field: Real Estate Finance.
+ **Skofronick, James G.,** Professor of Physics, Ph.D. 1964, University of Wisconsin at Madison. Fields: Experimental Physics, Molecular Scattering, Surface Physics.
- **Slaveva-Griffin, Suetla,** Assistant Professor of Classics, Ph.D. 2000, University of Iowa. Fields: Late Greek Philosophy, Neoplatonism, Literary Tradition, Development of Literary Expression of Philosophical Concepts.
- **Sliger, Bernard F.,** President Emeritus, Director, Stavros Center for Economic Education, and Professor of Economics, Ph.D. 1955, Michigan State University. Fields: Public Finance, Economics of Education.
+ **Sly, David F.,** Professor of Sociology, Ph.D. 1970, Brown University. Fields: Demography, Human Ecology, Urbanization, Migration, Indonesia, Africa.
+ **Smith, Dale L.,** Chair and Associate Professor of Political Science, Ph.D. 1987, Massachusetts Institute of Technology. Fields: International Politics, Statistical Analysis, Computer Techniques, Model Building.
+ **Smith, James C.,** Professor of Psychology, Ph.D. 1959, Florida State University. Fields: Olfaction and Taste, Animal Psychophysics, Taste Aversion Learning in Animals and Humans, Taste Perception as a Function of Age.
+ **Smith, Thomas E.,** Associate Dean and Professor of Social Work, Ph.D. 1982, University of Washington. Fields: Mental Health, Substance Abuse, Social Work Research.
+ **Smutny, Gayla**, Assistant Professor of Urban and Regional Planning, Ph.D. 1997, University of California-Irvine. Fields: Politics of Land Use Change, Growth Management Policy, Environment and Sustainable Development.
+ **Snyder, William R.,** Professor of Educational Leadership, Ph.D. 1966, University of Illinois. Fields: Administration and Supervision.
- **Sobanjo, John O.,** Associate Professor of Civil and Environmental Engineering, Ph.D. 1991, Texas A & M University. Fields: Transportation Engineering, Construction.
+ **Sommer, Sally R.,** Professor of Dance, Ph.D., New York University.
+ **Song, Kai Sheng,** Associate Professor of Statistics, Ph.D. 1993, University of California at Davis. Fields: Change-point Problems, Information Theory, Nonparametrics, Modeling, Time Series and Signal Processing.

  Southerland, Harold P., Associate Professor of Law, J.D. 1966, University of Wisconsin School of Law. Fields: Statutory Interpretation, Conflicts of Laws, Law and Literature, Writing Skills.
- **Southerland, Sherry,** Assistant Professor of Science Education, Ph.D. 1994, Louisiana State University. Fields: Reform and Equity in Science Teaching and Learning, Intersection of Culture and Conceptual Change, Role of Nature of Science in Science Learning.
+ **Spacagna, Antoine E.,** Professor of Modern Languages and Linguistics, Ph.D. 1973, Ohio State University. Fields: Eighteenth Century French Literature, Realism, Naturalism, Poetry from Baudelaire to Present, Theater from Eighteenth Century to Present, Modern Criticism, French Cinema, Phonetics and Civilization.
- **Spainhour, Lisa K.,** Associate Professor of Civil and Environmental Engineering, Ph.D., North Carolina State University. Fields: Composite Materials, Structural Engineering.
- **Speake, Dianne L.,** Associate Dean and Professor of Nursing, Ph.D. 1986, University of Texas.
- **Speer, Kevin,** Associate Professor of Oceanography, Ph.D., Massachusetts Institute of Technology.
+ **Spencer, Peter,** Professor of Music, D.M.A. 1971, University of West Virginia. Field: Theory.
+ **Spurgeon, Phillip C.,** Professor of Music, B.M. 1958, Oberlin Conservatory of Music. Fields: Orchestra, Orchestral Conducting.
+ **Srinivasan, Ashok,** Visiting Assistant Professor of Computer Science, Ph.D. 1996, University of California at Santa Barbara. Fields: Scientific Computing, Applications, Parallel Algorithms, High Performance Computing, Mathematical Software.

+ **Srivastava, Anuj,** Assistant Professor of Statistics, Ph.D. 1996, Washington University. Fields: Image Understanding, Computational Statistics, Statistical Signal Processing.
+ **Stair, Ralph M., Jr.,** Professor of Management Information Sciences, Ph.D. 1974, University of Oregon. Fields: Information Requirements Analysis, Strategic Use of Technology.
• **Stallins, J. Anthony,** Assistant Professor of Geography, Ph.D. 2000, University of Georgia. Fields: Biogeography, Global Warming, Environmental Field Methods.
+ **Standley, Fred L.,** Professor of English, Ph.D. 1963, Northwestern University. Fields: Nineteenth – and Twentieth – century British Literature, African-American Literature.
+ **Standley, Jayne M.,** Professor of Music, Ph.D. 1976, The Florida State University. Field: Music Therapy.
• **Stanley, Patricia H.,** Professor of Modern Languages and Linguistics, Ph.D. 1975, University of Virginia. Fields: Contemporary and Nineteenth – century German Literature, Literature of the Absurd, Relation between Literature and Music, Womens Issues.
• **Stauber, Alvin,** Professor of Risk Management/Insurance and Real Estate and Program in Business Law, J.D. 1969, University of North Carolina. Fields: Business Law, Consumer Law, Commercial Law.
• **Stebleton, Michelle M.,** Associate Professor of Music, M.S., University of Michigan. Fields: Brass Performance/Literature.
Steele, David J., Assistant Dean of Curriculum and Evaluation, and Professor of Family Medicine and Rural Health, Medicine, Ph.D. 1982, University of Wisconsin at Madison. Fields: Medical Education, Physician-Patient Relationship, Humanities and Medicine.
Stefanovic, Branko, Assistant Professor of Biomedical Sciences, Medicine, Ph.D. 1991, Florida State University. Field: Molecular Biology.
+ **Steinberg, Philip**, Assistant Professor of Geography, Ph.D. 1996, Clark University. Fields: Politics of the Environment, Oceans.
+ **Steinbock, Oliver,** Assistant Professor of Chemistry, Ph.D. 1993, Gottingen (Germany). Fields: Kinetics, Experimental and Theoretical Studies of Nonequilibrium Systems, Chemical Self-organization.
+ **Stephan, Friedrich K.,** Professor of Psychology, Ph.D. 1972, University of California, Berkeley. Fields: Localization and Function of Biological Clocks in Vertebrates, Light and Food as Entraining Signals for Circadian Rhythms.
+ **Stepina, Lee P.,** Associate Professor of Management, Ph.D. 1981, University of Illinois. Fields: Human Resource Management, Organizational Behavior, Labor Relations, International Management.
+ **Steppan, Scott,** Assistant Professor of Biological Science, Ph.D. 1995, University of Chicago. Field: Genetic Processes in the Evolution of Morphological Diversity.
+ **Stern, Melvin E.,** Professor of Oceanography, Ph.D. 1956, Massachussetts Institute of Technology. Fields: Double Diffusion, Salt Finger Convection Ocean Microstructure, Theoretical Studies of Finite Amplitude, Disturbances in Shear Flow, Entrainment Mechanism, Large-scale Turbulence and Entrainment in the Ocean, and Separation of Coastal Currents.
Stern, Nat S., Professor of Law, J.D. 1979, Harvard University Law School. Fields: Constitutional Law, Legal History.
+ **Stiegman, Albert**, Associate Professor of Chemistry, Ph.D. 1984, Columbia University. Fields: Inorganic Chemistry, Materials, Chemical Sensors, Heterogeneous Catalysis.
+ **Stiftel, Bruce**, Professor of Urban and Regional Planning, and Faculty Associate, Florida Growth Management Conflict Resolution Consortium, Ph.D. 1986, University of North Carolina at Chapel Hill. Fields: Planning Theory, Citizen Participation and Dispute Resolution, Environmental Planning and Natural Resources Management.
• **Stiles, Wilbur J.,** Associate Professor of Mathematics, Ph.D. 1965, Georgia Institute of Technology. Field: Functional Analysis.
+ **Stith, Melvin T.,** Dean, College of Business, and Professor of Marketing, Ph.D. 1977, Syracuse University. Fields: Consumer Behavior, Strategic Marketing, Value Systems.
• **Stoddard, Kate,** Assistant Professor of Classics, Ph.D. 2000, University of Virginia. Fields: Greek Literature, Greek and Latin Didoctic Poetry, Greek Mythology.
• **Stoecklin, Sara,** Assistant in Computer Science, Ph.D. 1991, Florida State University. Fields: Software Engineering, Patterns, Formal Specification for Real-time Systems.
+ **Stoltzfus, Nathan,** Assistant Professor of History, Ph.D. 1993, Harvard. Fields: Nazi Germany, the Former East Germany, and the Social Political History of Ethnic Germans Following World War II.
+ **Stowell, H. Peter,** Professor of English and Motion Picture, Television, and Recording Arts, and Director of Undergraduate Studies, School of Motion Picture, Television, and Recording Arts, Ph.D. 1972, University of Washington. Fields: Film Studies, Screenwriting, Comparative Literature.
+ **Strait, Paul W.,** Associate Professor and Associate Chair of History, Ph.D. 1970, Princeton University. Field: Medieval Europe.
+ **Streem, James K.,** Professor of Music, M.S. 1959, The Juilliard School. Fields: Piano Performance, Piano Literature.
+ **Streepey, Margaret M.,** Assistant Professor of Geological Sciences, Ph.D. 2001, University of Michigan at Ann Arbor. Fields: Tectonics, Geochronology.
• **Stuckey-French, Elizabeth,** Assistant Professor of English, Ph.D. 1992, University of Iowa. Field: Creative Writing (fiction).
+ **Suarez, Virgil,** Professor of English, MFA, Louisiana State University. Fields: Latino Literature, Twentieth – Century Literature, Latin American Literature, Creative Writing, Drama, Fiction, Non-fiction, Poetry.
+ **Sumners, Dewitt Lee,** Chair and Professor of Mathematics, Ph.D. 1967, Cambridge University. Fields: Knot Theory, Topology of 3- and 4-Manifolds, Application of Topology to Chemistry and Biology.
+ **Sussman, Mark,** Visiting Assistant Professor of Mathematics, Ph.D. 1994, University of California at Los Angeles.
• **Sutherland, Mary S.,** Professor of Curriculum and Instruction, Ed.D. 1973, University of Alabama. Fields: Program Development, School Health Education, Health Promotion and Community Development for Senior Citizens and Minorities.
+ **Tabor, Samuel L.,** Professor of Physics, Ph.D. 1972, Stanford University. Fields: Experimental Physics; High-spin States in Nuclei.
+ **Tam, Christopher K. W.,** Professor of Mathematics, and Research Associate, Geophysical Fluid Dynamics Institute, Ph.D. 1966, California Institute of Technology. Fields: Aeroacoustics, Jet Noise, Hydrodynamic Stability, Turbulence, Computational Fluid Dynamics.
+ **Tanenbaum, Jan K.,** Professor of History, Ph.D. 1969, University of California. Fields: Twentieth-century Europe, France.
+ **Tate, Richard L.,** Associate Professor of Educational Research, Ph.D. 1973, University of Illinois. Fields: Applied Univariate and Multivariate Statistics.
+ **Tatum, William Jeffrey,** Chair and Professor of Classics, Ph.D. 1986, University of Texas at Austin. Fields: Latin Literature, Roman History.
+ **Tawfiq, Kamal,** Professor of Civil and Environmental Engineering, Ph.D., University of Maryland. Fields: Geotechnical Engineering, Soil Dynamics, Geotextiles.
• **Taylor, Jeanette,** Assistant Professor of Psychology, Ph.D. 1999, University of Minnesota. Fields: Physiological Risk Factors for Substance Use Disorders, Personality Disorders, Genetic and Environmental Factors Associated with Individual Differences in Antisocial Behavior, Personality Disorders and Substance Use Problems (using data on twins).
• **Taylor, John,** Assistant Professor of Sociology, Ph.D. 2000, University of Miami. Fields: Medical Sociology, Mental Health, Social Psychology.
+ **Taylor, Kenneth A.,** Professor of Biology, Ph.D. 1975, University of California at Berkeley. Fields: Three-dimensional Electron Microscopy of Macromolecules and Macromolecular Assemblies, Biophysics of Muscle Contraction, Structure of the Cytoskeleton.
• **Teasley, Martell L.,** Assistant Professor of Social Work, Ph.D. 2002, Howard University. Fields: Medical Social Work, School Social Work, Practice and Evaluation, Social Justice and Social Work Ethics, Black Studies, Culturally Competent Practice, and African American Adolescent Development.
+ **Telotte, John C.,** Associate Professor of Chemical Engineering, Ph.D. 1985, University of Florida. Fields: Semiconductor Processing, Thermophysical Properties, Critical Phenomena.
+ **Tenenbaum, Gershon,** Professor of Sports and Exercise Psychology, Ph.D. 1982, University of Chicago. Fields: Measurement and Statistical Analysis, Information Processing and Decision Making, Motivation and Exertion.
• **Thagard, Norman,** Professor of Electrical and Computer Engineering, M.D. 1977, University of Texas Health Science Center. Field: Microelectronic Circuits.
+ **Thistle, David,** Chair and Professor of Oceanography, Ph.D. 1977, Scripps Institution of Oceanography. Field: Organization of Shallow-water Soft-bottom Communities and Deep-sea Benthic Communities.
+ **Thomas, Andre,** Professor of Music, D.M.A. 1983, Illinois University. Fields: Music Education, Choral Music.
+ **Thomas, Hollie B.,** Professor of Educational Leadership, Ph.D. 1969, Purdue University. Field: Vocational Education.
+ **Thompson, Gregory L.,** Associate Professor of Urban and Regional Planning, Ph.D. 1987, University of California at Irvine. Fields: Transportation Planning, Transportation History, Plan Development Methods.
+ **Thyer, Bruce A.,** Professor and Dean of Social Work, Ph.D. 1982, University of Michigan. Fields: Evidence-based Practice, Evaluation Research, Behavior Analysis, Mental Health, Substance Abuse, Social Work Theory, Practice and Education.
+ **Toole, Tonya,** Professor of Nutrition, Food, and Exercise Sciences, Ph.D. 1978, Pennsylvania State University. Fields: Motor Learning and Motor Control, Motor Memory, Effects of Aging on the Motor System.
+ **Torgesen, Joseph K.,** Professor of Psychology, Ph.D. 1976, University of Michigan. Fields: Cognitive Disabilities in Learning Disabled Children, Psychology of Reading, Development and Individual Differences in Memory, Computer Assisted Instruction in Basic Academic Skills.
+ **Trautman, Lisa Scott,** Assistant Professor of Communication Disorders, Ph.D. 1997, University of Nebraska. Fields: Speech-language Pathology, Counseling and Speech-language Pathology, Fluency Disorders, School Age Language Disorders.
+ **Travis, Joseph,** Professor of Biological Science, Ph.D. 1980, Duke University. Fields: Ecological and Population Genetics, Population Biology.
+ **Trinch, Shonna L.,** Assistant Professor of Spanish, Ph.D. 1999, University of Pittsburgh.
+ **Troeger, Betty J.,** Associate Professor of Art Education, Ph.D. 1981, North Texas State University. Fields: Art Education, Education Administration.
+ **Trombley, Paul Q.,** Associate Professor of Biological Science, Ph.D. 1990, University of Oregon. Fields: Olfaction, Synopic Physiology and Plasticity, Ion Channel Modulation.
Trowers, Eugene A., Assistant Dean of Tallahassee Regional Medical Campus, and Professor of Clinical Sciences, Medicine, M.D. 1976, New York University, and M.P.H. 1993, University of Texas. Fields: Internal Medicine, Gastroenterology, Public Health.
+ **Tschinkel, Walter R.,** Professor of Biological Science, Ph.D. 1968, University of California at Berkeley. Fields: Social Behavior and Biology of Insects, Chemical Communication.
+ **Tull, James F.,** Professor of Geological Sciences, Ph.D. 1973, Rice University. Fields: Structural Geology, Tectonics.
+ **Tung, Leonard J.,** Associate Professor of Electrical and Computer Engineering, Ph.D. 1977, Texas Tech. Fields: Fault Analysis for Digital Systems, Multivariable Control Systems, Decentralized Control Systems, Artificial Neural Systems.
+ **Turner, James C. Jr.,** Associate Professor of Computer Science, Ph.D. 1986, Carnegie-Mellon University. Fields: High Performance Computing, Numerical Algorithms, Computational Fluid Dynamics.
+ **Turner, R. Jay,** Professor of Sociology, Ph.D., Syracuse University.
• **Turner, Robert G.,** Professor of Finance, Ph.D. 1969, University of Kentucky. Field: Banking.
+ **Twiss, Sumner B.,** Professor of Religion, Ph.D. 1974, Yale University. Fields: Comparative Ethics and Moral Theory, Religion and Human Rights, Comparative Moral and Religious Thought, Philosophy and Theory of Religion.
• **Ungurait, Donald F.,** Associate Professor of Communication, Ph.D. 1986, University of Wisconsin. Fields: Mass Media Industries: History and Evolution, Structure and Economics, Film Studies, Production and Distribution Business.
Usatine, Richard P., Professor of Family Medicine and Rural Health, Medicine, M.D. 1982, Columbia University College of Physicians and Surgeons. Field: Medical Education.
+ **Van Dommelen, Leonard L.,** Professor of Mechanical Engineering, Ph.D. 1981, Cornell University. Fields: Computational and Theoretical Fluid Mechanics, Numerical Methods.
Van Doren, John W., Professor of Law, LL.B. 1959, Yale University School of Law. Fields: Property, Jurisprudence, Comparative Law.
+ **van Engelen, Robert A.,** Assistant Professor of Computer Science, Ph.D. 1998, Leiden University-Netherlands. Fields: Problem-solving Environments, High Performance Computing, Probabilistic and Causal Networks, Knowledge-based Systems, Logic Programming.
Van Hartesveldt, Carol J., Associate Dean for Research and Professor of Biomedical Sciences, Medicine, Ph.D. 1968, University of Rochester. Field: Behavioral Neuroscience.
+ **van Hoeij**, **Mark**, Associate Professor of Mathematics, Ph.D. 1996, University of Nijmegen. Fields: Algebraic Geometry, Cryptopgraphy, Symbolic Computation.
+ **Van Sciver, Steven W.**, Professor of Mechanical Engineering, Ph.D., University of Washington. Fields: Cryogenics and Heat Transfer.
• **Van Weelden, Kimberly**, Assistant Professor of Music Education, Ph.D. 2000, University of Arizona. Field: Music Education.

+ **Van Winkle, David H.,** Chair and Professor of Physics, Ph.D. 1984, University of Colorado. Fields: Experimental Physics: Liquid Crystals, Colloids, Macromolecules.
+ **Vickers, Thomas J.,** Associate Professor of Chemistry, Ph.D. 1964, University of Florida. Fields: Spectroscopical Analysis, Raman Spectroscopy.
+ **Vickory, Frank A.,** Professor of Risk Management/Insurance and Real Estate and Program in Business Law, J.D. 1977, The Florida State University. Fields: Administrative Law, Liability Issues, Legal Aspects of Employer-employee Relations.
+ **Vinals, Jorge,** Program Director, Supercomputer Computations Research Institute, and Associate Professor of Chemical Engineering, Ph.D. 1983, Barcelona. Fields: Pattern Formation, Instability, Chaos, Phase Transitions.
  Vinson, J. Kenneth, Professor of Law, LL.M. 1964, Yale University School of Law. Fields: Torts, Workers Compensation, Law and Public Opinion, Legal Process.
+ **Vinton, Linda S.,** Associate Professor of Social Work, Ph.D. 1987, University of Wisconsin. Fields: Aging, Domestic Violence.
• **Vitkus, Daniel J.** Assistant Professor of English, Ph.D. 1992, Columbia University. Field: Renaissance Literature.
+ **Voich, Dan, Jr.,** Chair and Professor of Management, Ph.D. 1965, University of Illinois. Fields: International Policy and Strategic Management.
+ **VonGlahn, Denise**, Assistant Professor of Musicology, Ph.D. 1995, University of Washington. Fields: Musicology, Twentieth – Century.
+ **Von Molnar, Stephan**, Professor of Physics and Director, Center for Materials Research and Technology, Ph.D. 1965, California at Riverside. Fields: Strongly Correlated Systems, Magnetism, and Magnetic Semiconductors; Transport and Thermodynamic Measurements; Fabrication and Characterization of Magnetic Nanostructures.
+ **Wager, Walter W.,** Professor of Educational Research, Ed.D. 1972, Indiana University. Fields: Computer-based Instruction, Instructional Design Models.
+ **Wagner, Richard K.,** Professor of Psychology, Ph.D. 1985, Yale University. Fields: Human Intelligence, Acquisition of Complex Cognitive Skills and Knowledge, Phonological Processing and Reading, Intelligent Tutoring Systems.
+ **Wahl, Horst D.,** Professor of Physics, Ph.D. 1969, Vienna. Fields: Experimental Physics, Particle Physics.
+ **Waldo, Gordon P.,** Service Professor of Criminology and Criminal Justice, Ph.D. 1967, Ohio State University. Fields: Research Methods, Law and Social Control, Corrections.
+ **Walker, Eric C.,** Associate Professor of English, Ph.D. 1984, University of North Carolina at Chapel Hill. Fields: Eighteenth – Century British Literature, Romantic Literature, Scottish Literature.
+ **Wallat, Cynthia,** Professor of Educational Foundations and Policy Studies, Ph.D. 1975, University of Pittsburgh. Fields: Socialization and Language, Sociolinguistics, Comparative Social Policy, Institutional and Professional Development.
• **Walsdorf, Kristie**, Assistant in Physical Education, Ph.D. 2000, Florida State University. Field: Teacher Education.
+ **Walters, Lori J.,** Professor of Modern Languages and Linguistics, Ph.D. 1986, Princeton University. Fields: French Literature of the Middle Ages and Renaissance, Women's Studies.
+ **Wang, Hsu-pin,** Chair and Professor of Industrial Engineering, Ph.D., Pennsylvania State University. Fields: Computer Integrated Manufacturing, Intregrated Product and Process Design.
+ **Wang, Qi,** Associate Professor of Mathematics, Ph.D. 1991, Ohio State University. Fields: Applied Mathematics, Computational Mathematics, Fluid Dynamics.
  Wang, Yanchang, Assistant Professor of Biomedical Sciences, Medicine, Ph.D. 1997, University of Virginia. Field: Cell Cycle Regulation.
+ **Wang, Yang,** Associate Professor of Geological Sciences, Ph.D., 1992, Utah. Fields: Low-temperature Geochemistry, Isotope Geochemistry, Global Change.
+ **Wang, Zuoxin,** Associate Professor of Psychology, Ph.D. 1991, University of Massachusetts. Fields: Neuronal and Hormonal Bases of Social Behavior.
+ **Ward, Cheryl A.**, Assistant Professor of Anthropology, Ph.D. 1993, Texas A&M University. Fields: Nautical Archaeology, Archaeobotany, Eastern Mediterranean Archaeology, Global Seafaring.
+ **Warf, Barney L.,** Chair and Professor of Geography, Ph.D. 1985, University of Washington. Fields: Contemporary Issues,World Systems Theory, Urban Geography, Economic Geography.
• **Wasko, Molly McLure,** Assistant Professor of Management Information Systems, Ph.D. 2002, University of Maryland. Fields: Networks of Practice, Intersection of Strategic Resources and IT, Knowledge Management.
• **Waxman, Lisa J. Kinch,** Associate Professor of Interior Design, M.S. 1982, Oregon State University. Fields: Computer-aided Design, Social/Psychological Design Factors.
+ **Weatherly, Georges L.,** Professor of Oceanography, Ph.D. 1971, Nova University. Fields: Deep Ocean Circulation, Turbulence, Sediment Transport.
+ **Weaver, George E.,** Associate Dean of Arts and Sciences, Professor of Psychology, Ph.D. 1967, University of Iowa. Fields: Human Memory, Cognition, Information Processing, Memory for Visual Information.
  Weidner, Donald J., Dean, College of Law, and Professor of Law, J.D. 1969, University of Texas. Fields: Property, Partnership Tax, Real Estate Transactions, Agency Partnership.
+ **Weingarden, Lauren S.,** Associate Professor of Art History, Ph.D. 1981, University of Chicago. Fields: 19th – and 20th – Century Art.
+ **Wekezer, Jerry W.,** Chair and Professor of Civil and Environmental Engineering, Ph.D. 1974, Technical University of Gdansk. Fields: Structural Mechanics, Transportation Applications.
• **Welsh, Thomas M.,** Associate Professor of Dance, Ph.D., University of Kansas. Fields: Exercise Science and Learning Theory.
+ **Wesson, Garlen D.,** Visiting Assistant Professor of Chemical Engineering, Ph.D. 1997, Michigan State University. Fields: Computational Fluid Dynamics (CFD), Turbulence Modeling, Drop Break-up, Phase Change Materials.
• **West, Joseph,** Associate Professor of Hospitality, Ph.D. 1988, Virginia Polytechnic Institute and State University. Fields: Strategic Planning and Marketing, Restaurant Operations, Institutional Food Service.
+ **Weston, Kenneth D.,** Assistant Professor of Chemistry, Ph.D. 1998, University of California at Santa Barbara. Fields: Optical Microscopy, Fluorescence Spectroscopy, Single Molecule Fluorescence Detection, Microfluidics, Fluctuation Correlation Spectroscopy
+ **Wetherby, Amy,** Professor of Communication Disorders, Ph.D. 1982, University of California, Santa Barbara. Fields: Language Development, Language Disorders Diagnosis, Neurological Disorders.
+ **Whalley, David,** Professor of Computer Science, Ph.D., Virginia. Fields: Compilers, Computer Architecture, Performance Evaluation, Realtime Systems.
• **Whiteside, Patricia A.,** Assistant Professor and Assistant Dean, School of Nursing, Ph.D. 1979, The Florida State University. Fields: Family/Community Nursing, Teaching, and Administration.
• **Wiedenhoever, Ingo,** Visiting Assistant Professor of Physics, Ph.D. 1995, University of Cologne. Field: Experimental Nuclear Physics, especially Nuclear Astrophysics.
• **Wilke, Dina J.,** Assistant Professor of Social Work, Ph.D. 2000, University of Wisconsin. Fields: Alcohol and Drug Abuse Treatment, HIV/AIDS, Domestic Violence, Women's Issues.
• **Wilkens, Paul L.**, Professor of Management, Ph.D. 1971, Ohio State University. Fields: Training and Development, Strategic Management, Business and Society.
• **Williams, Pat Ward,** Professor of Art, M.F.A. 1987, Maryland Institute College of Art. Fields: Photo-imaging, Installation, Alternative Processes, African American Studies.
+ **Winchester, John W.,** Professor of Oceanography, Ph.D. 1955, Massachusetts Institute of Technology. Fields: Atmospheric Chemistry of Aerosols and Reactive Gases with Reference to Global Scale Transport, Chemical Transformations, Interactions with Oceanic and Terrestrial Environments and, for Some Pollutants, their Ecological and Human Health Effects.
+ **Winegardner, Mark**, Associate Professor of Creative Writing, MFA 1987, George Mason University. Field: Creative Writing.
• **Wingate, David B.,** Associate Professor of Music, M.S. 1962, The Juilliard School. Fields: Voice Performance, Voice Literature.
• **Wingate, Mark,** Assistant Professor of Music Theory and Composition, D.M.A. 1998, University of Texas. Field: Theory.
+ **Winn, Alice A.,** Associate Professor of Biological Science, Ph.D., Michigan State University. Fields: Plant Population Ecology and Evolution.
+ **Wise, Sherwood W.,** Professor of Geological Sciences, Ph.D. 1970, University of Illinois. Fields: Marine Geology, Stratigraphy.
+ **Wolfgang, Charles H.,** Professor of Educational Theory and Practice, Ph.D. 1973, University of Pittsburgh. Fields: Cognitive Process, Discipline Models, Teacher Education.
+ **Wood, Susan N.,** Assistant Professor of English Education, Ph.D. 1997, University of Florida. Fields: Issues and Trends in Teaching English Language Arts in Middle and High Schools, Critical Literacy, Composition, Reading, Assessment.
+ **Woods, Juliann J.,** Visiting Associate Professor of Audiology and Speech Pathology, Ph.D. 1990, University of Oregon. Fields: Infant and Toddler Language Development and Disorders, Austim Spectrum Disorders.
• **Wright, T. Perrin, Jr.,** Professor of Mathematics, Ph.D. 1967, University of Wisconsin-Madison. Field: Geometric Topology.
• **Wright, Thomas G.,** Professor of Music, M.M. 1942, Indiana University. Fields: Piano, Music Literature.
+ **Wynot, Edward D.,** Professor of History, Ph.D. 1970, Indiana University. Fields: East Central Europe, Poland, Russia.
+ **Xiong, Peng,** Assistant Professor of Physics, Ph.D. 1993, Brown University. Fields: Condensed Matter Experiment, Mesoscopic Physics, Quantum Fluctuations and Phase Transitions in Reduced Dimensions.
+ **Yang, Kun,** Assistant Professor of Physics, Ph.D. 1994, Indiana University. Field: Theoretical Condensed Matter Physics.
+ **Yasinsac, Alec,** Assistant Professor of Computer Science, Ph.D. 1996, University of Virginia. Fields: Network Security, Security Protocols, Computer Forensics, Formal Methods, Software Engineering.
+ **Yazdani, Nur,** Professor of Civil and Environmental Engineering, Ph.D. 1984, University of Maryland. Fields: Structural Engineering, Structural Reliability, Prestressed Concrete.
  Yetter, John F., Professor of Law, LL.M. 1968, Yale University School of Law. Fields: Criminal Law and Procedure, Florida Criminal Practice, Antitrust.
• **Young, Eric R.,** Assistant Professor of Economics, Ph.D. 2001, Carnegie Mellon University. Field: Computational Macroeconomics
+ **Young, Eutiquio,** Professor of Mathematics, Ph.D. 1962, University of Maryland. Fields: Partial Differential Equations, Analytic and Numerical Solutions of Initial-boundary Value Problems.
+ **Young, Marilyn J.,** Professor of Communication, Ph.D. 1974, University of Pittsburgh. Fields: Forensics, Legal Communication, Rhetorical Analysis, Historical-Critical Research, Soviet-American Relations and Rhetoric.
+ **Young, Particia Henry,** Professor of Dance, M.A.
+ **Yuan, Xin,** Visiting Assistant Professor of Computer Science, Ph.D. 1998, University of Pittsburgh. Fields: Computer Networks, Parallel Processing, Compiler, Data Flow Analysis, Compilation Techniques for Distributed Memory Machines, Optical Interconnection Networks, ATM, WDM/TDM Communications.
+ **Zahn, Douglas A.**, Professor of Statistics, Ph.D. 1970, Harvard University. Fields: Research on and Teaching of Statistical Consultation, Quality Improvement in Statistics Education, Applied Statistics.
+ **Zenz, Gary Joseph,** Professor of Marketing, Ph.D. 1968, University of Wisconsin. Fields: Purchasing Management, Market Research.
+ **Zhang, Chun,** Associate Professor of Industrial Engineering, Ph.D., University of Iowa. Fields: Computer-aided Manufacturing, Composite Materials.
+ **Zheng, Jim,** Associate Professor of Electrical and Computer Engineering, Ph.D. 1990, State University of New York at Buffalo, Fields: Optoelectronic and Energy Storage Devises, Solid State Thin Film Deposition and their Applications.
+ **Zindler, Alan,** Professor of Geology, Ph.D. 1980, Massachusetts Institute of Technology. Fields: Earth Evolution, Environmental Geochemistry, Isotope Geochemistry.
• **Zollar, Jawole**, Professor of Dance, M.F.A. 1979, The Florida State University. Fields: Contemporary Technique and Performance, Choreography and Directing.
+ **Zou, Xiaolie**, Professor of Meteorology, Ph.D. 1988, Institute of Atmospheric Physics. Fields: 4DVAR Problem, Satellite and Radar Data Assimilation, Cyclone, "Target" Observations and Physical Parameterization.
+ **Zuehlke, Thomas W.**, Associate Professor of Economics, Ph.D. 1983, University of Florida. Fields: Econometrics, Monetary Economics.
+ **Zwaan, Rolf,** Professor of Psychology, Ph.D., University of Utrecht in the Netherlands. Fields: Cognitive and Behavioral Science, Psychology of Language, Discourse Comprehension, Construction of Mental Models from Stories, Memory; Spatial Cognition and Computer Models of Cognition.

DISTINGUISHED RESEARCH PROFESSORS

Harper, William C., M.S., Distinguished Research Professor, 1990–1991, Professor of Studio Art (Retired)
O'Brien, James J., Ph.D., 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
Tam, Christopher K. W., Ph.D., California Institute of Technology; Distinguished Research Professor, 1990–1991, Robert O. Lawton Distinguished Professor, 2000–2001, Professor of Mathematics and Mechanical Engineering
Loper, David E., Ph.D., Case Western Reserve University; Distinguished Research Professor, 1991–1992, George W. DeVore Professor of Geological Sciences, 1999, and Director, Geophysical Fluid Dynamics Institute
Parker, Glenn R., Ph.D., California; Distinguished Research Professor, 1991–1992, Professor of Political Science

Benson, Bruce L., Ph.D., Texas A&M; Distinguished Research Professor, 1992–1993, Professor of Economics
Graziadei, Pasquale P., M.D., Pavia, Italy; Distinguished Research Professor, 1992–1993, Professor of Biological Science (Retired)
Sumners, Dewitt L., Ph.D., Cambridge; Distinguished Research Professor, 1992–1993, Robert O. Lawton Distinguished Professor, 1997–1998, and Professor of Mathematics
Kemper, Kirby W., Ph.D., Indiana; Distinguished Research Professor, 1993–1994, John David Fox Professor of Physics, 2000, and Robert O. Lawton Distinguished Professor, 2002–2003
Nam, Charles B., Ph.D., North Carolina; Distinguished Research Professor, 1993–1994, Professor of Sociology (Retired)
Turner, Ralph V., Ph.D., Johns Hopkins; Distinguished Research Professor, 1993–1994, Service Professor of History
Bryant, John L., Ph.D., Georgia; Distinguished Research Professor, 1994–1995, Professor of Mathematics
Freeman, Marc E., Ph.D., West Virginia; Distinguished Research Professor, 1994–1995, Lloyd M. Beidler Professor of Biological Science, 2000
Owens, Joseph F., III, Ph.D., Tufts; Distinguished Research Professor, 1994–1995, Chair and Guenter Schwarz Professor of Physics, 2000
Hollander, Myles, Ph.D., Stanford; Distinguished Research Professor, 1995–1996, Robert O. Lawton Distinguished Professor, 1998-1999, and Professor of Statistics
James, Frances C., Ph.D., Arkansas; Distinguished Research Professor, 1995–1996, Pasquale Grazidei Professor of Biological Science, 1999
Stern, Melvin E., Ph.D., Massachusetts Institute of Technology; Distinguished Research Professor, 1995–1996, V. W. Ekman Professor of Oceanography, and National Academy of Sciences
Pfeffer, Richard, Ph.D., Massachusetts Institute of Technology; Distinguished Research Professor, 1996–1997, Carl-Gustaf Rossby Professor of Meteorology
Torgesen, Joseph, Ph.D., Michigan; Distinguished Research Professor, 1996–1997, Robert M. Gagne Professor of Psycology and Education, 2000, and Professor of Psychology
Van Sciver, Steven W., Ph.D., Washington; Distinguished Research Professor, 1996–1997, Professor of Mechanical Engineering
Hagopian, Vasken, Ph.D., Pennsylvania; Distinguished Research Professor, 1997–1998, Joseph E. Lannutti Professor of Physics, 1999
Myles, John F., Ph.D., Wisconsin; Distinguished Research Professor, 1997–1998, Professor of Sociology
Nicholson, Sharon E., Ph.D., Wisconsin; Distinguished Research Professor, 1997–1998, Heinz and Katharina Lettau Professor of Climatology, 2002, and Professor of Meteorology
Balkwill, David L., Ph.D., Pennsylvania State; Distinguished Research Professor, 1998–1999, Professor of Biological Science
Hirsh, Barry T., Ph.D., Virginia; Distinguished Research Professor, 1998–1999, Professor of Economics
Marshall, Alan George, Ph.D., Stanford; Distinguished Research Professor, 1998–1999, Kasha Professor of Chemistry, 1999
Gontarski, Stanley E., Ph.D., Ohio State; Distinguished Research Professor, 1999–2000, Sarah Herndon Professor of English, 1999
Holton, Robert A., Ph.D., Florida State; Distinguished Research Professor, 1999–2000, Matthew Suffness Professor of Chemistry, 2002
Clarke, Allan J., Ph.D., Cambridge; Distinguished Research Professor, 2000 – 2001, Adrian E. Gill Professor of Oceanography, 2001
Cross, Timothy A., Ph.D., Pennsylvania; Distinguished Research Professor, 2000 – 2001, Earl Frieden Professor of Chemistry and Biochemistry, 2002
Olsen, Dale A., Ph.D., California at Los Angeles; Distinguished Research Professor, 2000 – 2001, Professor of Music
Fenstermaker, John J., Ph.D. Ohio State; Distinguished Research Professor, 2001–2002, Distinguished Teaching Professor, 2000–2001, Fred L. Standley Professor of English, 2002
Tabor, Samuel, Ph.D., Stanford; Distinguished Research Professor, 2001–2002, Professor of Physics
Taylor, Kenneth A., Ph.D California at Berkeley; Distinguished Research Professor 2001–2002, Professor of Biological Science
Dalal, Nar S., Ph.D., British Columbia; Dirac Professor of Chemistry, 2001, Distinguished Research Professor, 2002–2003, and Chair of Chemistry
Nof, Doron, Ph.D., Wisconsin; Distinguished Research Professor, 2002–2003, and Fridtjof Nansen Professor of Oceanography, 2001
Tschinkel, Walter R., Ph.D., California at Berkeley; Distinguished Research Professor, 2002–2003, and Margaret Y. Menzel Professor of Biological Science, 1999

DISTINGUISHED TEACHING PROFESSORS

Clark, Ronald J., Ph.D., Kansas; Distinguished Teaching Professor, 1989–1990, Professor of Chemistry
Hofer, Kurt G., Ph.D., Vienna; Distinguished Teaching Professor, 1989–1990, Robert O. Lawton Distinguished Professor, 1994-1995, Professor of Biological Science
Horward, Donald D., Ph.D., Minnesota; Distinguished Teaching Professor, 1989–1990, Eminent Scholar and Professor of History
Madsen, Clifford K., Ph.D., Florida State; Distinguished Teaching Professor, 1989–1990, Alumni Professor, 1985-1988, Robert O. Lawton Distinguished Professor, 1988–1989, Professor of Music
Mellon, Edward K., Ph.D., Texas; Distinguished Teaching Professor, 1989–1990, Chair and Professor of Chemistry (Retired)
Jones, James P., Ph.D., Florida; Distinguished Teaching Professor, 1990–1991, Professor of History
Lhamon, W. T., Jr., Ph.D., Indiana; Distinguished Teaching Professor, 1990–1991, George M. Harper Professor of English, 2000
Rashotte, Michael E., Ph.D., Toronto; Distinguished Teaching Professor, 1990–1991, Professor of Psychology
Rogers, William W., Ph.D., North Carolina; Distinguished Teaching Professor, 1990–1991, Professor of History (Retired)
Sandon, Leo, Ph.D., Boston; Distinguished Teaching Professor, 1990–1991, Chair and Professor of Religion, and Director, Program in American Studies
Burroway, Janet G., M.A., Distinguished Teaching Professor, 1991–1992, Service Professor of English, Robert O. Lawton Distinguished Professor, 1995–96, and Mckenzie Professor, 1986
Levenson, David B., Ph.D., Harvard; Distinguished Teaching Professor, 1992–1993, Associate Professor of Religion
Smith, James C., Ph.D., Florida State; Distinguished Teaching Professor, 1993–1994, Professor of Psychology, Robert O. Lawton Distinguished Professor, 1992–1993
Leach, Stephen P., Ph.D., Florida State; Distinguished Teaching Professor, 1994–1995, Assistant Scholar/Scientist of Computer Science
Walker, Eric C., Ph.D., North Carolina at Chapel Hill; Distinguished Teaching Professor, 1995–1996, Associate Professor of English
Darling, Carol A., Ph.D., 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., Ph.D., North Carolina; Distinguished Teaching Professor, 1997–1998, Associate Professor of Chemistry
Moore, Dennis D., Ph.D., North Carolina; Distinguished Teaching Professor, 1998–1999, Associate Professor of English
Reiser, Robert A., Ph.D., Arizona State; Distinguished Teaching Professor, 1999-2000, Professor of Educational Research
Fenstermaker, John J., Ph.D., Ohio State; Distinguished Teaching Professor, 2000 – 2001, Distinguished Research Professor, 2001 – 2002, Fred L. Standley Professor of English, 2002
Sathe, Shridhar, Ph.D., Utah State; Distinguished Teaching Professor, 2002–2003, D.K. Salunkhe Professor of Food Science, 2001, and Professor of Nutrition, Food and Exercise Sciences

McKENZIE PROFESSORS

Berkley, Karen J., Ph.D., Washington; McKenzie Professor 1989, Professor of Psychology
Burroway, Janet G., M.A., McKenzie Professor 1986, Service Professor of English
Dye, Thomas R., Ph.D., Pennsylvania; McKenzie Professor 1986, Service Professor of Political Science
Hintikka, Jaako, Ph.D., Helsinki, Finland; McKenzie Professor 1986–1990, Professor of Philosophy (Retired)
Howard, Louis N., Ph.D., Princeton; McKenzie Professor 1986, Professor of Mathematics (Retired)
Hunter, Christopher, Ph.D., Cambridge; McKenzie Professor 1991, Chair and Professor of Mathematics
Kirby, David K., Ph.D., Johns Hopkins; Robert O. Lawton Distinguished Professor, 2003–2004, Professor of English, McKenzie Professor, 1989
Winstead, William O., M.M., McKenzie Professor 1986–1988, Professor of Music (Resigned)

DAISY PARKER FLORY ALUMNI PROFESSORS

Madsen, Clifford K., Ph.D., Florida State; Alumni Professor 1985–1988, Distinguished Professor 1988–1989, Distinguished Teaching Professor, 1989–1990, Professor of Music
Martin, Patricia Y., Ph.D., Florida State; Alumni Professor 1989, Professor of Sociology
Standley, Fred L., Ph.D., Northwestern; Alumni Professor 1985, Professor of English

THE PRESIDENT AND THE PROVOST'S NAMED PROFESSORSHIP PROGRAM

Baer, Howard A., Ph.D., Wisconsin; J. Daniel Kimel Professor of Physics, 2002
Beckham, Joseph C., J.D., Ph.D., Florida; Allan Tucker Professor of Educational Policy Studies and Leadership, 2000, Professor of Educational Leadership
Berry, William D., Ph.D., Minnesota; Marian D. Irish Professor of Political Science, 1999
Bickley, R. Bruce, Jr., Ph.D., Duke; Griffith T. Pugh Professor of English, 2002
Bishop, Wendy, Ph.D., Indiana of Pennsylvania; Kellogg W. Hunt Professor of English, 2000
Blomberg, Thomas G., D.Crim., Berkeley; Sheldon L. Messinger Professor of Criminology, 2001
Boehrer, Bruce T., Ph.D., Pennsylvania; Bertram H. Davis Professor of English, 2001
Bowers, Philip L., Ph.D., 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
Brooks, James S., Ph.D., Oregon; Grace C. and Willian G. Moulton Professor of Physics, 2002
Bryant, John L., Ph.D., Georgia; Distinguished Research Professor, 1994–1995, Orville G. Harrold Professor of Mathematics, 2000
Burnett, William C., Ph.D., Hawaii; Carl Henry Oppenheimer Professor of Oceanography, 2002
Chandra, Namas, Ph.D., Texas A&M; Krishnamurty Karamcheti Professor of Engineering, 2000, and Professor of Mechanical Engineering
Chanton, Jeffrey P., Ph.D., North Carolina; John Widmer Winchester Professor of Oceanography, 2002, and Professor of Oceanography and Geological Sciences
Clarke, Allan J., Ph.D., Cambridge; Distinguished Research Professor, 2000–2001, Adrian E. Gill Professor of Oceanography, 2001
Cloonan, William J., Ph.D., North Carolina at Chapel Hill; Richard L. Chapple Professor of Modern Languages and Linguistics, 1999
Coats, Pamela K., Ph.D., Nebraska at Lincoln; Robert C. Earnest Professor of Finance, 2002
Connerly, Charles E., Ph.D., Michigan; William G. and Budd Bell Professor of Urban and Regional Planning, 2002, and Chair of Urban and Regional Planning
Contreras, Robert J., Ph.D., Michigan State; James C. Smith Professor of Psychology, 2002, and Director of Neuroscience
Cross, Timothy A., Ph.D., Pennsylvania; Distinguished Research Professor, 2000 – 2001, Earl Frieden Professor of Chemistry and Biochemistry, 2002
Dagotto, Elbio R., Ph.D., Instituto Balseiro; Edward A. Desloge Professor of Physics, 2001, and Scholar/Scientist, School of Computational Science and Information Technology
Dalal, Nar S., Ph.D., British Columbia; Dirac Professor of Chemistry, 2001, Distinguished Research Professor, 2002–2003, and Chair of Chemistry
Darling, Carol A., Ph.D., Michigan State; Margaret Rector Sandels Professor of Human Sciences, 1999, Distinguished Teaching Professor, 1996–1997, and Professor of Family and Child Sciences
de Grummond, Nancy T., Ph.D., North Carolina; M. Lynette Thompson Professor of Classics, 1999
Delp, Roy E., M.M., Walter S. James Professor of Voice, 2001, Professor of Music
Dewar, William K., Ph.D., Massachusetts Institute of Technology; Pierre Welander Professor of Oceanography, 2001, and Faculty Associate, School of Computational Science and Information Technology
Dorsey, John, Ph.D., Cincinnati; Katherine Blood Hoffman Professor of Chemistry, 2000
Driscoll, Marcy P., Ph.D., Massachusetts; Leslie J. Briggs Professor of Educational Research, 2002, and Chair of Educational Psychology and Learning Systems

Eberstein, Isaac Warren, Ph.D., 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, Ph.D., Rhode Island; Michael J. Greenberg Professor of Biological Sciences, 2001, and Director, Institute of Molecular Biophysics

Fenstermaker, John J., Ph.D., Ohio State; Distinguished Teaching Professor, 2000 – 2001, Distinguished Research Professor 2001–2002, Fred L. Standley Professor of English, 2002

Fernandez, Roberto G., Ph.D., Florida State; Dorothy Lois Breen Hoffman Professor of Modern Languages and Linguistics, 2001

Fiorito, Jack T., Ph.D., Illinois; J. Frank Dame Professor of Management, 1999

Fisk, Zachary, Ph.D., California at San Diego; Paul A.M. Dirac Professor of Physics, 1999, National Academy of Sciences

Freeman, Marc, Ph.D., West Virginia; Distinguished Research Professor, 1994–1995, Lloyd M. Beidler Professor of Biological Science, 2000,

Geringer, John M., Ph.D., Florida State; Lewis V. Panbaskie Professor of Music, 2001, and Director, Center for Music Research

Goldsmith, Ronald E., Ph.D., Alabama; Richard M. Baker Professor of Marketing, 2001

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

Hagopian, Vasken, Ph.D., Pennsylvania; Distinguished Research Professor, 1997–1998, Joseph E. Lannutti Professor of Physics, 1999

Hahn, Cynthia, Ph.D., Johns Hopkins; Gulnar K. Bosch Professor of Art History, 2000

Hardy, Melissa, Ph.D., Indiana; Raymond F. Bellamy Professor of Sociology, 2000, and Program Director, Pepper Institute on Aging

Haymes, Emily M., Ph.D., Pennsylvania State; C. Etta Walters Professor of Exercise Science, 2000, and Professor of Nutrition, Food, and Exercise Sciences

Heald, Gary R., Ph.D., Michigan State; Theodore Clevenger, Jr. Professor of Communication, 2001, and Associate Dean of Communication

Herrnkind, William F., Ph.D., Miami; Robert K. Godfrey Professor of Biological Science, 2000

Hirsch, Adam J., Ph.D., J.D., Yale; David M. Hoffman Professor of Law, 2002

James, Frances C., Ph.D., Arkansas; Pasquale Graziadei Professor of Biological Science, 1999, Distinguished Research Professor, 1995–1996

Joiner, Thomas, Ph.D., Texas at Austin; Bright-Burton Professor of Psychology, 2000

Jumonville, Neil T., Ph.D., Harvard; William Warren Rogers Professor of History, 1999

Kacmar, K. Michele, Ph.D., Texas A&M; Charles A. Rovetta Professor of Management, 2000

Kelsay, John, Ph.D., Virginia; Richard L. Rubenstein Professor of Religion, 2000, and Chair of Religion

Kemper, Kirby, Ph.D., Indiana; Distinguished Research Professor, 1993–1994, Robert O. Lawton Distinguished Professor, 2002–2003, John David Fox Professor of Physics, 2000, 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., Ph.D., Virginia Polytechnic Institute; Martin A. Schwartz Professor of Chemistry and Biochemistry, 2002

Lang, Alan R., Ph.D., Wisconsin; R. Robert Browning Professor of Psychology, 2001

Lhamon, William T., Ph.D., Indiana; Distinguished Teaching Professor, 1990–1991, George M. Harper Professor of English, 2000

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

MacPherson, David A., Ph.D., Pennsylvania; Abba Lerner Professor of Economics, 1999

Marcus, Nancy H., Ph.D., Yale; Robert O. Lawton Distinguished Professor, 2001–2002, Mary Sears Professor of Oceanography

Marshall, Alan G., Ph.D., Stanford; Distinguished Research Professor, 1998–1999, Kasha Professor of Chemistry, 1999

McElrath, Joseph R., Ph.D., South Carolina; William Hudson Rogers Professor of English, 1999

McKeague, Ian, Ph.D., North Carolina; Ralph A. Bradley Professor of Statistics, 2000

McNeece, C. Aaron, Ph.D., Michigan; Walter W. Hudson Professor of Social Work, 2000

Moffatt, Robert J., Ph.D., Michigan; Georgia Alice Stamford Professor of Exercise Science, 2000, and Chair of Nutrition, Food, and Exercise Sciences

Nicholson, Sharon E., Ph.D., Wisconsin; Distinguished Research Professor, 1997-1998, Heinz and Katharina Lettau Professor of Climatology, 2001, and Professor of Meteorology

Nof, Doron, Ph.D., Wisconsin; Distinguished Research Professor, 2002–2003, and Fridtjof Nansen Professor of Oceanography, 2001

Ortiz-Taylor, Sheila, Ph.D., California at Los Angeles; Francis G. Townsend Professor of English, 2000

Outlaw, William H., Jr., Ph.D., Georgia; Peter H. Homann Professor of Biological Science, 2001

Owens, Joseph, Ph.D., Tufts; Distinguished Research Professor, 1994–1995, Guenter Schwarz Professor of Physics, 2000

Peters, Michael, Ph.D., Ohio State; Elvin J. Dantin Professor of Engineering, 2000, and Chair of Chemical Engineering

Pfeffer, Richard L., Ph.D., Massachusetts Institue of Technology; Distinguished Research Professor, 1996–1997, Carl-Gustaf Rossby Professor of Meteorology, 1999

Pietralunga, Mark F., California at Berkeley; Victor Oelschlager Professor of Modern Languages, 2000, and Chair of Modern Languages and Linguistics

Portman, Richard R., Gordon Sawyer Professor of Recording Arts, 1999, and Assistant in Film, School of Motion Picture, Television, and Recording Arts

Quine, John R., Ph.D., Michigan; Charles W. McArthur Professor of Mathematics, 2002

Rasmussen, David, Ph.D., Washington; James H. Gapinski Professor of Economics, 2000, Director, DeVoe L. Moore and Family Center for Critical Issues

Riley, Mark, Ph.D., Liverpool; Raymond K. Sheline Professor of Physics, 2000

Roberts, Thomas M., Ph.D., Notre Dame; Robert B. Short Professor of Biological Science, 2002, and Chair of Biological Science

Ruhl, John B., LL.M., George Washington; J.D., Virginia; Joseph Story Professor of Law, 2001

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

Seaton, S. Douglass, Ph.D., Columbia; Warren D. Allen Professor of Music, 2002

Standley, Jayne, Ph.D., Florida State; Ella Scoble Opperman Professor of Music, 2000

Stephan, Friedrich, Ph.D., California at Berkeley; Curt P. Richter Professor of Psychology and Neuroscience, 2000

Stern, Melvin E., Ph.D., Massachusetts Institute of Technology; Distinguished Research Professor, 1995–1996, National Academy of Sciences, V.W. Ekman Professor of Oceanography, 1999

Tatum, W. Jeffrey, Ph.D., Texas; Olivia Nelson Dorman Professor of Classics, 2000, Chair of Classics

Thomas Andre, D.M.A., Illinois; Owen F. Sellers Professor of Music, 1999

Torgesen, Joseph, Ph.D., Michigan; 1996–1997, Robert M. Gagne Professor of Psychology and Education, 2000 Distinguished Research Professor

Tschinkel, Walter R., Ph.D., California at Berkeley; Distinguished Research Professor, 2002–2003, and Margaret Y. Menzel Professor of Biological Science, 1999

Von Molnar, Stephan, Ph.D., California at Riverside; Robert A. Kromhout Professor of Physics, 2001, and Director, Center for Materials Research and Technology

Wagner, Richard K., Ph.D., Yale; Alfred Binet Professor of Psychology, 1999

Wang, Hsu-Pin (Ben), Ph.D., Pennsylvania State; Simon Ostrach Professor of Engineering, 2000, and Chair of Industrial Engineering

Wetherby, Amy, Ph.D., California at Santa Barbara; Laurel L. Schendel Professor of Communication Disorders, 2000

Winegardner, Mark D., M.F.A., Janet G. Burroway Professor of English, 2001

Wise, Sherwood W., Ph.D., Illinois; Lyman D. Toulmin Professor of Geological Sciences, 2001

Young, Marilyn, Ph.D., Pittsburgh; Wayne C. Minnick Professor of Communication, 2000

Zollar, Jawole Willa Jo, M.F.A., Nancy Smith Fichter Professor of Dance, 1999

THE ROBERT O. LAWTON DISTINGUISHED PROFESSORS

Rogers, William Hudson, Ph.D., Virginia; Distinguished Professor 1957–1958, Professor of English, (Deceased 7/11/75)

Irish, Marian Doris, Ph.D., Yale; Distinguished Professor 1958–1959, Professor and Chair of Political Science (Deceased 11/11/01)

Liddell, Anna Forbes, Ph.D., North Carolina; Distinguished Professor 1959–1960, Professor of Philosophy (Deceased 8/30/79)

Grunwald, Ernest Max, Ph.D., California; Distinguished Professor 1960–1961, Professor of Chemistry (Resigned)

Housewright, Wiley Lee, Ed.D., New York; Distinguished Professor 1961–1962, Professor and Dean, School of Music (Retired)

Kasha, Michael, Ph.D., California; Distinguished Professor 1962–1963, Professor of Chemistry and Director, Institute of Molecular Biophysics (Retired)

Hoffman, Dorothy Lois Breen, Ph.D., Illinois; Distinguished Professor 1963–1964, Professor of Modern Languages and Linguistics (Deceased 3/7/85)

Floyd, Carlisle, Jr., M.M., Distinguished Professor 1964–1965, Professor of Music (Resigned)

Watts, Betty Monaghan, Ph.D., Washington, St. Louis; Distinguished Professor 1965–1966, Professor of Food and Nutrition (Retired)

Sheline, Raymond K., Ph.D., California at Berkeley; Distinguished Professor 1966–1967, Professor of Chemistry and Physics, and Royal Danish Academy of Science and Letters (Retired)

Choppin, Gregory R., Ph.D., Texas; Sc.D., Loyola; Distinguished Professor 1967–1968, Professor of Chemistry

Nichols, Eugene D., Ph.D., Illinois; Distinguished Professor 1968–1969, Professor and Head of Mathematics Education (Retired)

Frieden, Earl, Ph.D., Southern California; Distinguished Professor 1969–1970, Professor of Chemistry (Retired)

Bradley, Ralph Allan, Ph.D., North Carolina; Distinguished Professor 1970–1971, Professor and Head of Statistics (Deceased 10/30/01)

Beidler, Lloyd Mumbauer, Ph.D., Johns Hopkins; Distinguished Professor 1971–1972, Professor of Biological Science (Retired)

Hunt, Kellogg Wesley, Ph.D., Iowa; Distinguished Professor 1972–1973, Professor of English (Deceased 11/4/98)

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

Kenshalo, Daniel Ralph, Ph.D., Washington; Distinguished Professor 1974–1975, Professor of Psychology (Retired)

Fallon, Richard Gordon, M.A., Distinguished Professor 1975–1976, Professor and Dean, School of Theatre (Retired)

Nikolaidi, Elena, Distinguished Professor 1976–1977, Professor of Music (Deceased 11/14/02)

Rubenstein, Richard Lowell, Ph.D., Harvard; Distinguished Professor 1977–1978, Professor of Religion (Retired)

Hess, Seymour L., Ph.D., Chicago; Distinguished Professor 1978–1979, Professor of Meteorology (Deceased 1/15/82)

Harper, George M., Ph.D., North Carolina; Distinguished Professor 1979–1980, Professor of English (Retired)

Walborsky, Harry M., Ph.D., Ohio State; Distinguished Professor 1980–1981, Professor of Chemistry (Deceased 10/15/02)

Gilmer, Robert, Ph.D., Louisiana State; Distinguished Professor 1981–1982, Professor of Mathematics

Gagne, Robert M., Ph.D., Brown; Distinguished Professor 1982–1983, Professor of Research, Development, and Foundations (Retired)

Taylor, J. Herbert, Ph.D., Virginia; Distinguished Professor 1983–1984, Professor of Biological Sciences, and Program Director, Institute of Molecular Biophysics (Deceased 12/29/98)

Mandelkern, Leo, Ph.D., Cornell; Distinguished Professor 1984–1985, Professor of Chemistry (Retired)

Proschan, Frank, Ph.D., Stanford; Distinguished Professor 1984–1985, Professor of Statistics (Retired)

Krishnamurti, Tiruvalam N., Ph.D., Chicago; Distinguished Professor 1985–1986, Professor of Meteorology

Simberloff, Daniel, Ph.D., Harvard; Distinguished Professor 1986–1987, Professor of Biological Science (Resigned)

Herz, Werner, Ph.D., Colorado; Distinguished Professor 1987–1988, Robert O. Lawton Professor of Chemistry (Retired)

Madsen, Clifford K., Ph.D., Florida State; Distinguished Professor 1988–1989, Alumni Professor 1985–1988, Distinguished Teaching Professor 1989–1990, Professor of Music

Greaves, Richard L., Ph.D., London; Distinguished Professor 1989–1990, Professor of History

Robson, Donald, Ph.D., Melbourne, Australia; Distinguished Professor 1990–1991, Professor of Physics, and Scientist/Scholar, School of Computational Science and Information Technology

Fichter, Nancy Smith, Ph.D., Texas Woman's University; Distinguished Professor 1991–1992, Chair and Professor of Dance (Retired)

Friedmann, E. Imre, Ph.D., Vienna; Distinguished Professor 1991–1992, Professor of Biological Science (Retired)

Smith, James C., Ph.D., Florida State; Distinguished Professor 1992–1993, Distinguished Teaching Professor 1993–1994, Professor of Psychology
Sethuraman, Jayaram, Ph.D., Indian Statistical Institute; Distinguished Professor 1993–1994, Professor of Statistics
Hofer, Kurt G., Ph.D., Vienna; Distinguished Professor 1994–1995, Distinguished Teaching Professor 1989–1990, Professor of Biological Science
Burroway, Janet G., M.A., Distinguished Professor 1995–1996, McKenzie Professor, Service Professor of English.
Travis, Joseph, Ph.D., Duke; Distinguished Professor 1996–1997; Professor of Biological Science
Sumners, Dewitt L., Ph.D., Cambridge; Distinguished Research Professor, 1992-1993, Distinguished Professor 1997 - 1998, and Professor of Mathematics
Hollander, Myles, Ph.D., Stanford; Distinguished Professor, 1998–1999, Distinguished Research Professor, 1995-1996, Professor of Statistics
O'Brien, James J., Ph.D., Texas A&M; Distinguished Professor, 1999–2000, Distinguished Research Professor, 1990–1991, Professor of Meteorology and Oceanography, and Russian Academy of Natural Science
Tam, Christopher K. W., Ph.D., 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
Marcus, Nancy H., Ph.D., Yale; Distinguished Professor, 2001 – 2002, Mary Sears Professor of Oceanography, 2000, and Director, Program for Women in Math, Science, and Engineering
Kemper, Kirby W., Ph.D., Indiana; Distinguished Professor, 2002 – 2003, Chair and Professor of Physics, and John David Fox Professor of Physics, Distinguished Research Professor, 1993–1994
Kirby, David K., Ph.D., Johns Hopkins; Distinguished Professor, 2003–2004, Professor of English, McKenzie Professor, 1989

NATIONAL ACADEMY OF SCIENCES THE FLORIDA STATE UNIVERSITY MEMBERS

Beidler, Lloyd, Ph.D., Johns Hopkins; Distinguished Professor 1971–1972, Professor of Biological Science (Retired)
Caspar, Donald L., Ph.D., Yale; Professor of Biological Science
Fisk, Zachary, Ph.D., California at San Diego, Paul A.M. Dirac Professor of Physics, 1999
Howard, Louis, Ph.D., Princeton; McKenzie Professor 1986, Professor of Mathematics (Retired)
Kasha, Michael, Ph.D., California at Berkeley; Distinguished Professor 1962–1963, Professor of Chemistry/Institute of Molecular Biophysics (Retired)
Schrieffer, John R., Ph.D., Illinois; Nobel Laureate in Physics, 1972; Professor of Physics, National High Magnetic Field Laboratory
Stern, Melvin E., Ph.D., Massachusetts Institute of Technology; Distinguished Research Professor, 1995–1996, V.W. Ekman Professor of Oceanography, 1999
Taylor, J. Herbert, Ph.D., Robert O. Lawton Distinguished Professor 1983–1984, Service Professor of Biological Science (Deceased 12/29/98)

FOREIGN ACADEMIES THE FLORIDA STATE UNIVERSITY MEMBERS

Boyd, Monica, Ph.D., Duke; Mildred and Claude Pepper Distinguished Professor of Sociology, and Royal Society of Canada
O'Brien, James J., Ph.D., 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
Sheline, Raymond K., Ph.D., 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 LAUREATE

Schrieffer, John R., Ph.D., Illinois; Professor of Physics, Nobel Laureate in Physics, 1972

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Deviney Hall	43	DEV	F-7
Diffenbaugh Building	2	DIF	F-9
Dirac Science Library	20	DSL	C-5
Dittmer Chemistry Lab	38	DLC	C-5
Dodd Hall	4	DOD	F-9
Dodd Hall Auditorium	49	DHA	F-9
Dorman Hall	112	DOR	F-7
Duxbury Hall (Nursing)	40	SCN	D-5
Engineering Lab Building	114	ELB	B-5
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Fine Arts Building	7	FAB	C-10
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FSU Track & Training Facility (Mike Long)	91	TRK	D-3
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Oglesby Union - Crenshaw Building	193	CRB	C-6
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Oglesby Union - Moore Auditorium	195	MOR	C-7
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Regional Rehabilitation Center	73	RRC	E-8
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Roberts Hall	32	LAW	F-12
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Rogers Hall	44	ROG	A-3
Rovetta Business Building	23	RBA	D-7
Rovetta Business Building	52	RBB	C-7
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Sandels Building	135	SAN	D-8
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Shaw Building	11	RSB	D-8
Shores Building	19	LSB	E-7
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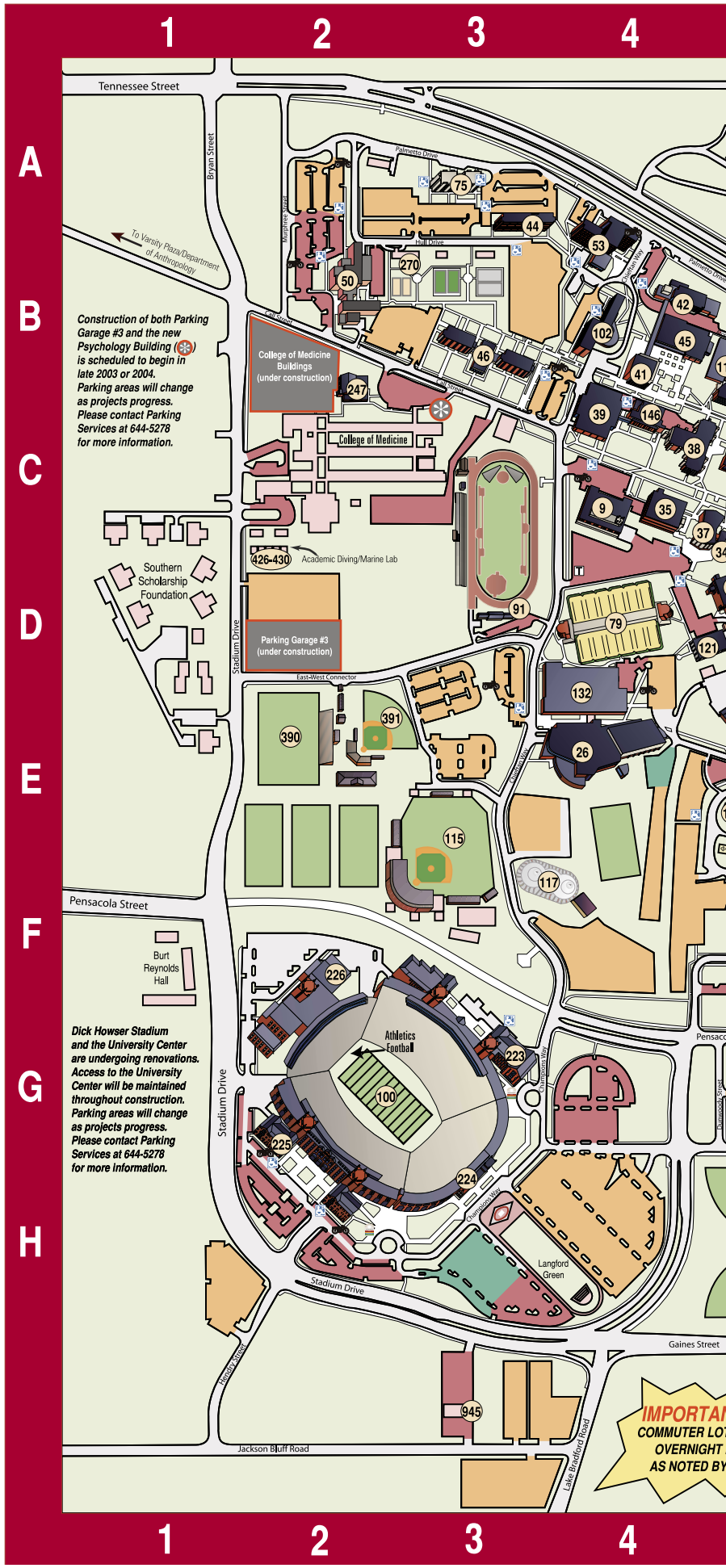
Women's Center	299	WOM	E-6
Women's Soccer Complex	390	SCO	E-2
Women's Softball Complex	391	SOF	E-2



Campus Map

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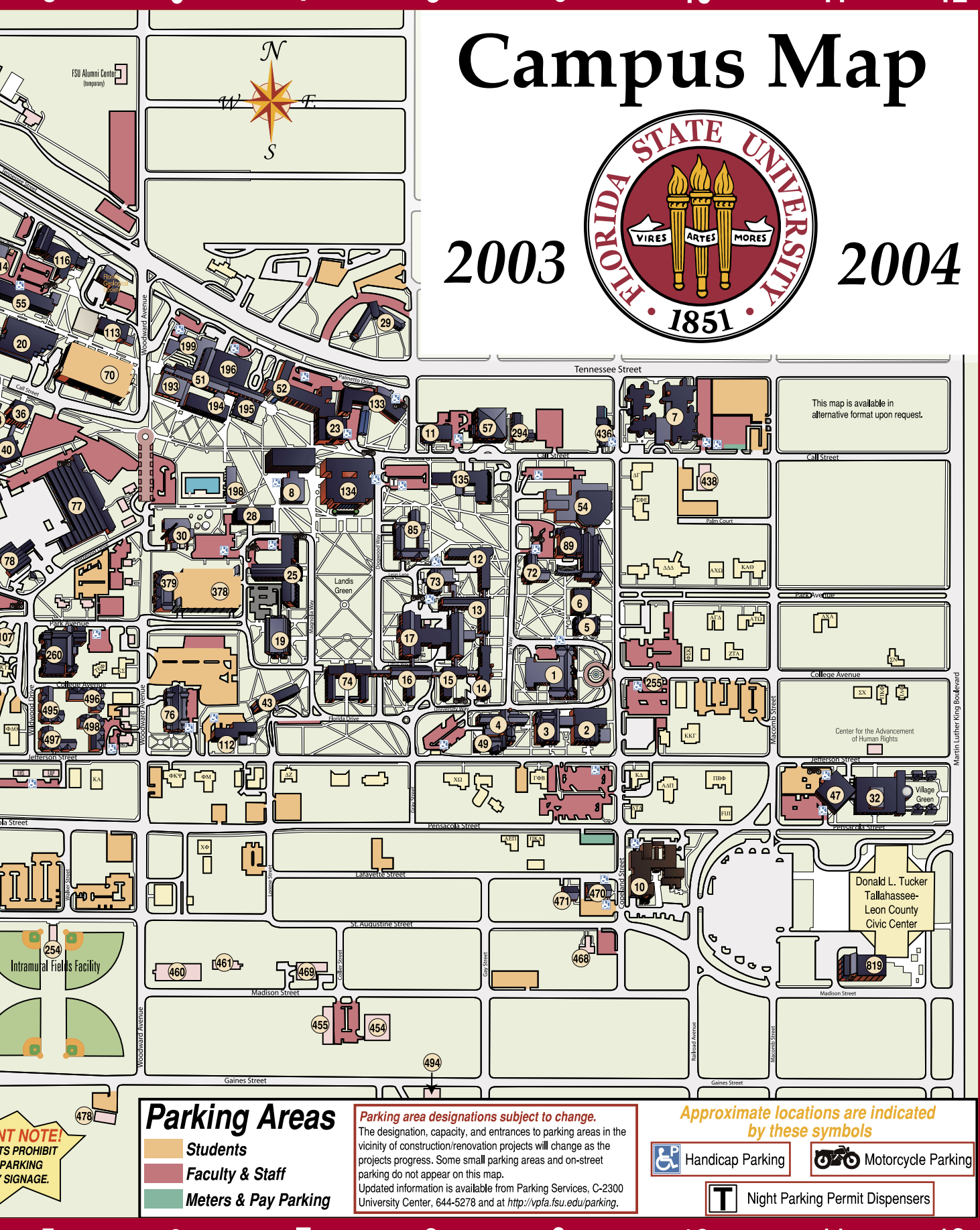

Parking Areas

- Students
- Faculty & Staff
- Meters & Pay Parking

Parking area designations subject to change.
The designation, capacity, and entrances to parking areas in the vicinity of construction/renovation projects will change as the projects progress. Some small parking areas and on-street parking do not appear on this map.
Updated information is available from Parking Services, C-2300 University Center, 644-5278 and at *http://vpfa.fsu.edu/parking*.

Approximate locations are indicated by these symbols

- Handicap Parking
- Motorcycle Parking
- Night Parking Permit Dispensers

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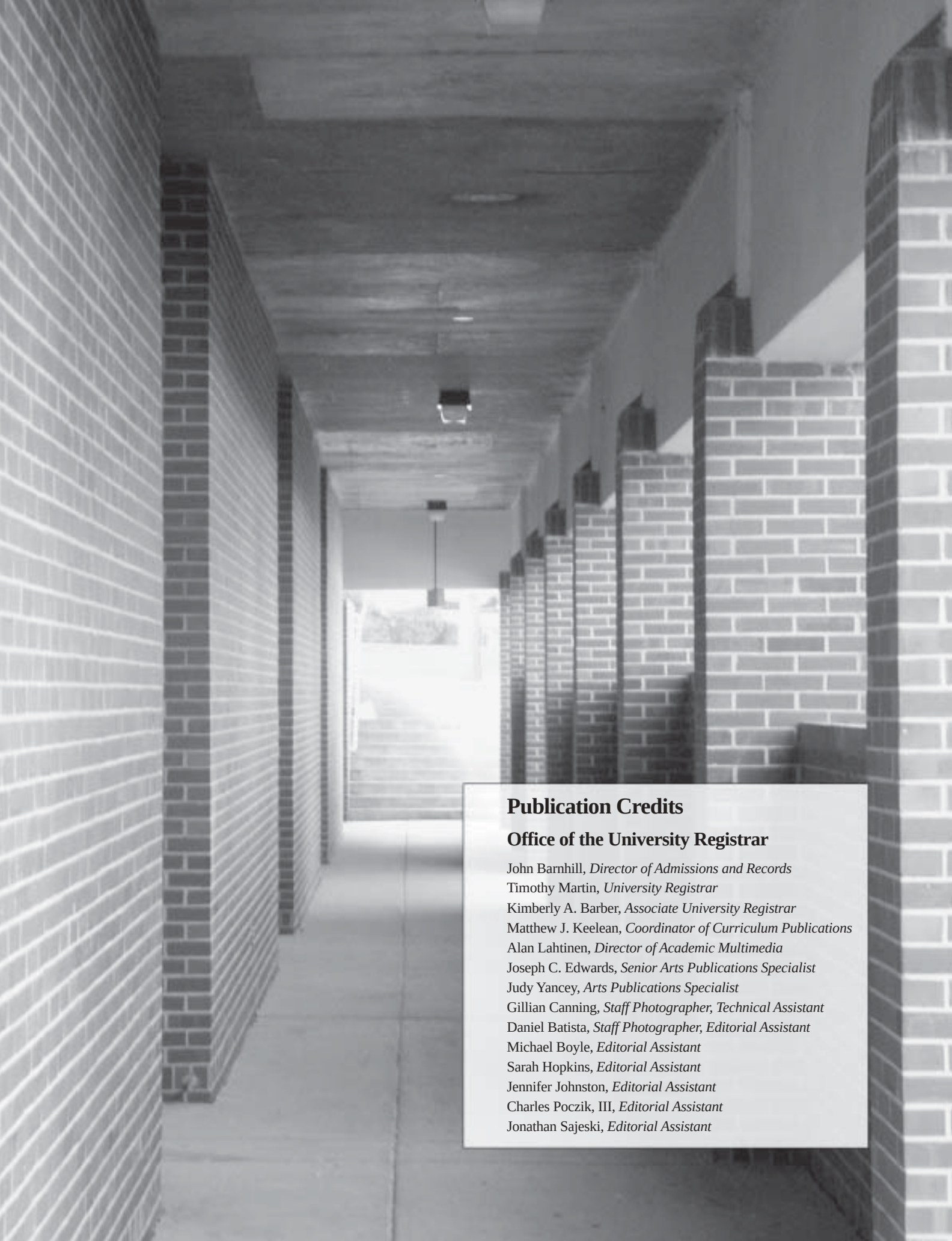
PARKING
SIGNAGE.



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