

TABLE OF CONTENTS

University Calendar	4	International Education	21	Registration Stop for Outstanding Charges.....	37
University Notices	5	International Commitment.....	21	Cancellation of Student Schedules for Non-Payment of Tuition and Fees.....	37
Required First Day Attendance Policy	5	Beyond Borders: International Service and Cultural Exchanges.....	21	Reinstatement of Student Schedules Canceled for Non-Payment of Tuition and Fees.....	37
Equal Employment Opportunity and Non-Discrimination Statement.....	5	International Programs.....	21	Tuition Waivers, Deferments, and Financial Arrangements.....	37
Persons with Disabilities.....	5	Other Programs.....	21	Out-of-State.....	37
HIV/AIDS Policy.....	5	Academic Degree and Certificate Programs	23	Waivers for Florida Residents Over 60 Years of Age.....	37
Sexual Harassment Policy.....	5	Admissions	27	Policy Concerning Late Fees.....	37
Mission Statement.....	7	General Information.....	27	Deferments and Financial Arrangements.....	37
A Summons to Responsible Freedom.....	8	Required Documents.....	27	Application Fee.....	38
Policy for the Use of Photographs and Videos in University Publications.....	9	Application for Admission.....	27	Refund of Fees.....	38
Integrity in Research and Creative Activity.....	9	College Transcripts.....	27	Regulations Concerning Refund of Fees Paid.....	38
Notification to All Applicants for Admission and Students Attending Florida State University.....	9	Test Scores.....	27	Withdrawal and Return of Financial Aid.....	38
Garnet E-Mail Accounts for All Students at Florida State University.....	9	Certification of Finances (International Applicants).....	27	Student Cancellation of Schedule.....	38
Florida State University Statement for Students on the Unlawful Possession, Use, or Distribution of Illicit Drugs and Alcohol.....	9	Admission Policies.....	27	Financial Aid.....	38
Florida State University		Teacher Education Programs.....	28	General Information.....	38
Alcohol Policy.....	9	Provisional Graduate Students.....	28	Loan Entrance Counseling Sessions.....	39
Standards of Conduct.....	9	Readmission.....	28	Fees and Financial Aid Students.....	39
Risks Associated with the Use of Illicit Drugs and the Abuse of Alcohol.....	9	Admission/Readmission Appeal Procedure.....	28	Deferments, Loans, and Check Cancellation.....	40
Educational and Counseling Resources and Support.....	10	Readmission After Multiple Withdrawals.....	29	Additional Sources of Financial Aid.....	40
University Disciplinary Sanctions for Alcohol/Drug Offenses.....	10	Second Graduate Program.....	29	Fellowships.....	40
The University	11	Special (Non-Degree Seeking) Students.....	29	Assistantships.....	41
University History.....	11	Transient Graduate Students.....	29	Housing	43
University Organization.....	12	Postdoctoral Students.....	29	Residence Halls.....	43
College and Department Overviews.....	12	Traveling Scholar Program.....	29	Alumni Village.....	43
Panama City Campus.....	13	Academic Common Market.....	29	Costs.....	43
Colleges.....	13	Cooperative Programs in the State of Florida, Division of Colleges and Universities.....	30	Applications.....	43
Institutes and Research Centers.....	14	International Applicants.....	30	Agreements.....	43
Other Instructional Units.....	15	Notice of Admission.....	30	Other Options.....	43
Academic and Professional Program Services.....	15	Finances.....	30	Information Sessions	45
The Florida Center for Public Management.....	16	Passports and Visas.....	30	Graduate Teaching Assistant Support.....	45
Learning Systems Institute.....	16	Health Insurance Requirement.....	30	Outstanding Teaching Assistant Awards.....	46
Institute for Cognitive Sciences.....	16	Intensive English Program.....	31	Teaching Associate Program.....	46
L.L. Schendel Speech and Hearing Clinic.....	16	International Center.....	31	Office of the University Registrar	47
The Florida State University Center for the Performing Arts.....	16	Panama City Campus Admissions.....	31	Registration.....	47
Libraries.....	16	College of Law Admissions.....	31	Registration Guide and Course Schedules.....	47
Graduate Education.....	17	College of Medicine Admissions.....	31	How to Find a Course in This <i>Bulletin</i>	47
Graduate Life.....	17	Financial Information, Tuition, Fees, Aid, Scholarships, and Employment	33	Registration Responsibility.....	47
Faculties.....	17	Tuition and Fees.....	33	Registration Permits.....	47
Affiliations.....	17	Residency Requirements for Tuition Purposes.....	33	Course/Credit Modification.....	47
Accreditation.....	18	Tuition and Instructional Fees.....	34	Stops to Registration.....	47
Carnegie Foundation Classification.....	18	Assessment of Fees.....	34	Registrar Cancellation of Schedule.....	47
Research Facilities and Special Programs	19	Special Fees, Fines, and Penalties.....	34	Cancellation of Student Schedules for Non-Payment of Tuition and Fees.....	47
Research and Research Facilities.....	19	Library Fees.....	35	Reinstatement of Student Schedules Canceled for Non-Payment of Tuition and Fees.....	48
Special Programs.....	19	Housing Costs.....	35	Student Cancellation of Schedule.....	48
		Annual Estimate of Cost.....	35	Drop/Add or Changes of Schedule.....	48
		Payment of Fees.....	35	Students Called to Active Military Duty.....	48
		Method of Payment.....	35	Directed Individual Study Courses.....	48
		State Employee Registration.....	36		
		Panama City Campus.....	36		
		Fee Liability.....	36		
		Delinquent Fees.....	36		

Florida Agricultural and Mechanical University—Florida State University Cooperative Program.....	48	Satisfactory/Unsatisfactory Course Option.....	63	College of Visual Arts, Theatre, and Dance	115
Interinstitutional Transient Students.....	48	Grading Practices.....	63	Florida's Statewide Course Numbering System.....	117
Auditor Seating Privileges.....	48	Grade Appeals System.....	63	Course Prefixes, Definitions, and Locations	118
Registration of Special (Non-Degree Seeking) Students.....	48	Forgiveness Policy.....	64	Academic Departments and Programs .	123
Transcripts.....	49	Suspension, Dismissal, and Reinstatement.....	64	Accounting.....	123
Enrollment Certification.....	49	Readmission.....	64	Pepper Institute on Aging and Public Policy.....	125
Access to Records.....	49	Withdrawal from the University.....	64	American and Florida Studies.....	126
Graduate Degree Requirements.....	51	Guidelines for Field Placement Fitness.....	64	Anthropology.....	127
Prerequisites for All Graduate Degrees ..	51	Medical Withdrawal.....	64	Art.....	130
Editing Services and Statistical Assistance.....	51	FACTS Information.....	64	Art Education.....	131
Graduate Students Enrolled for Two Degrees Simultaneously.....	51	Supervised Research and Teaching.....	64	Art History.....	134
Distinction between Dual and Joint Degrees.....	51	Credit for Short Courses.....	65	Asian Studies.....	136
Master's Degree Programs.....	51	Individual Study Courses.....	65	Biological Science.....	137
Degrees Offered.....	51	Changing of Major Department.....	65	Biomedical Sciences.....	140
Types of Programs.....	51	Student Services	67	Chemical and Biomedical Engineering	141
Requirements at Master's Level.....	51	Division of Student Affairs.....	67	Chemical Physics.....	146
Special Master of Arts Requirements	52	Career Center.....	67	Chemistry and Biochemistry.....	147
Doctoral Degree Programs.....	52	Child Care.....	67	Childhood Education, Reading, and Disability Services.....	150
Degrees Offered.....	52	Community and Public Service.....	67	Civil and Environmental Engineering..	156
Requirements of the Doctor of Philosophy Degree.....	53	Assessment Services.....	68	Classics.....	160
Requirements of the Doctor of Education Degree.....	55	StudentsFirst.....	68	Cognitive Sciences.....	164
Requirements of the Doctor of Music Degree.....	55	Seminole Dining.....	68	Communication.....	165
Graduation of Master's and Doctoral Students.....	55	Health Care.....	68	Communication Disorders.....	170
Academic Standards.....	55	Counseling Services.....	68	Computational Science.....	173
Faculty Academic Judgment.....	55	Housing.....	69	Computer Science.....	175
Registration for Final Term.....	56	International Center.....	69	Criminology and Criminal Justice.....	179
Clearance for Degrees.....	56	Center for Academic Retention and Enhancement (CARE).....	69	Critical Theory.....	180
Academic Regulations and Procedures..	57	Parking and Bus Services.....	69	Dance.....	181
Academic Honor Policy.....	57	Bicycle Parking.....	70	Demography and Population Health.....	183
FSU Academic Honor Pledge.....	57	Postal Services.....	70	Economic Policy and Government.....	184
Academic Honor Violations.....	57	Public Safety.....	70	Economics.....	185
Student Rights.....	57	Radio and Television.....	70	Educational Leadership and Policy Studies.....	187
Procedures for Resolving Cases.....	57	Recreation and Sports.....	71	Educational Psychology and Learning Systems.....	191
Sanctions.....	58	Dean of Students Department.....	71	Electrical and Computer Engineering...	195
Appeals.....	59	Student Government.....	71	English.....	199
Academic Honor Policy Committee.....	59	Oglesby Union, Student Life Building, and Flying High Circus.....	72	Family and Child Sciences.....	203
Amendment Procedures.....	59	Office of Veterans' Affairs.....	72	Finance.....	206
Grievance Procedure.....	59	College of Arts and Sciences	73	Geography.....	207
Grievance Procedure: Panama City Campus.....	59	College of Business	75	Geological Sciences.....	209
Notification of Students' Rights under FERPA.....	60	College of Communication	79	Geophysical Fluid Dynamics.....	211
Release of Student Information.....	60	College of Criminology and Criminal Justice.....	81	Health-Related Programs.....	213
Request to Prevent Publication of Directory Information.....	61	College of Education.....	83	Health Services Administration and Policy.....	214
Class Attendance.....	61	FAMU—FSU College of Engineering	87	History.....	215
Religious Holy Days.....	61	College of Human Sciences	89	History and Philosophy of Science.....	218
Classification of Students.....	61	College of Information	91	Humanities.....	219
Special (Non-Degree Seeking) Student Regulations.....	61	College of Law	95	Industrial Engineering.....	220
Full-Time Student Course Load.....	62	College of Medicine.....	97	Information Studies.....	223
Faculty Degree Candidates.....	62	College of Motion Picture, Television, and Recording Arts	101	Interior Design.....	224
Undergraduate Course Examinations.....	62	College of Music.....	103	International Affairs.....	225
Grading System.....	62	College of Nursing.....	107	Law.....	227
Grade Point Average.....	62	College of Social Sciences	109	Linguistics Minor.....	230
		College of Social Work.....	111	Management.....	230
				Management Information Systems.....	231
				Marketing.....	232
				Marriage and Family.....	233
				Mathematics.....	234
				Mechanical Engineering.....	238
				Medicine.....	241

Meteorology.....	242	Political Science	278	Sport Management, Recreation	
Middle and Secondary Education.....	244	Psychology.....	280	Management, and Physical Education..	300
Modern Languages and Linguistics.....	253	Public Administration and Policy.....	285	Statistics.....	302
Molecular Biophysics.....	259	Public Health	289	Textiles and Consumer Sciences	305
Motion Picture, Television, and		Religion	289	Theatre.....	307
Recording Arts.....	260	Risk Management/Insurance and Real		Urban and Regional Planning.....	311
Music	262	Estate and Program In Business Law ...	291	Women’s Studies	318
Neuroscience	267	Russian and East European Studies	292	University Administration.....	319
Nursing	268	Science Teaching	293	Graduate Faculty	321
Nutrition, Food, and Exercise Sciences	270	Social Science.....	293	Index	345
Oceanography.....	272	Social Work	294		
Philosophy	274	Sociology.....	296		
Physics.....	276				

UNIVERSITY CALENDAR

Opening and Closing Dates

	2007	2008	2009
Fall	August 27—December 14	August 25—December 12	August 24—December 11
Homecoming	October 26	TBA	TBA
Spring	January 7—April 25	January 6—May 1	January 6—April 30
Spring Break	March 10—14	March 9—13	March 8—March 12
Summer	2008	2009	2010
13 Week Session (A)	May 12—August 8	May 11—August 7	May 10—August 6
First 6 Week Session (B)	May 12—June 20	May 11—June 19	May 10—June 18
First 8 Week Session (F–Law)	May 12—July 3	May 11—July 2	May 10—July 1
Second 8 Week Session (D)	June 16—August 8	June 15—August 7	June 15—August 6
Second 6 Week Session (C)	June 30—August 8	June 29—August 7	June 28—August 6

Legal Holidays (no classes)

	2007	2008	2009
New Year's Day	Mon., January 1	Tues., January 1	Thurs., January 1
Martin Luther King, Jr. Day	Mon., January 15	Mon., January 21	Mon., January 19
Memorial Day	Mon., May 28	Mon., May 26	Mon., May 25
Independence Day	Wed., July 4	Fri., July 4	Fri., July 3 (observed)
Labor Day	Mon., September 3	Mon., September 1	Mon., September 7
Veteran's Day	Mon., November 12 (observed)	Tues., November 11	Wed., November 11
Thanksgiving Day	Thurs., November 22	Thurs., November 27	Thurs., November 26
Friday after Thanksgiving	Fri., November 23	Fri., November 28	Fri., November 27
Christmas Day	Tues., December 25	Thurs., December 25	Fri., December 25

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

Admission/Readmission/Special/Transient Application Deadlines

	Fall	Spring	Summer
Undergraduate			
Freshman ¹	February 14	November 1	February 14
Transfer	July 1	November 1	March 1
Graduate²	July 1	November 1	March 1
Readmission			
Undergraduate	July 1	November 1	March 1
Graduate ²	July 1	November 1	March 1
Special Student			
Undergraduate	July 1	November 1	March 1
Graduate ²	July 1	November 1	March 1
Transient Student			
Undergraduate ³	July 1	November 1	March 1
Graduate	July 1	November 1	March 1

¹ Subject to change each year.

² Many graduate programs have earlier deadlines than the University-wide published dates. Contact the individual program or department for the applicable admission deadline. Programs that use the University-wide dates may have earlier deadlines for consideration for financial awards.

³ Includes the Tallahassee Community College/Florida State University Cooperative Program.

All information used to make an admission decision must be received by the published deadline. In addition, the University reserves the right to close earlier, if warranted by enrollment limitations.

UNIVERSITY NOTICES

Required First Day Attendance Policy

University-wide policy requires all students to attend the first day of class meeting of all classes for which they are registered. Students who do not attend the first class meeting of a course for which they are registered will be dropped from the course by the academic department that offers the course. This policy applies to all levels of courses and to all campuses and study centers. **It remains the student's responsibility to verify course drops and check that fees are adjusted.** Please refer to 'Class Attendance' in the "Academic Regulations and Procedures" chapter in this *Bulletin* for additional information.

Equal Employment Opportunity and Non-Discrimination Statement

Florida State University (University) is committed to a policy of non-discrimination for any member of the University's community on the basis of race, creed, color, sex, religion, national origin, age, disability, veteran's or marital status, or any other protected group status. This policy applies to faculty, staff, students, visitors and contractors in a manner consistent with applicable federal and state laws, regulations, ordinances, orders and rules, and University policies, procedures and processes.

The University's standards of civility and collegiality recognize the dignity and value that each person contributes. 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 harmonious, high performing work and educational environment. It is management's intent for the work environment to be conducive to the betterment of the University.

The University realizes that there is an advantage in incorporating diversity and inclusion to achieve its mission and objectives. Further, it is the aim of the University in all lawful ways to carry forward its mission by:

- Ensuring accessibility of programs (including athletics), services and activities;
- Implementing policies and procedures that ensure that opportunities are available equitably to all;
- Building a multidimensional, diverse workforce reflective of availability;
- Fostering leadership and direction that promote an accountable, highly participatory, effective institution of higher learning at all levels; and
- Communicating the same to all individuals in various formats as applicable.

To facilitate or otherwise strive to ensure university-wide compliance, diversity and inclusion, the University President has appointed Renisha Gibbs, Director, Human Resources/Office of Diversity and Compliance and Chief Diversity Officer to develop, administer and coordinate university-wide initiatives. This will be accomplished through collaboration with the Office of the Dean of the Faculties and all other divisions and departments. Further, Human Resources and the Office of the Dean of the Faculties serve the University in helping to create an educational environment that promotes fairness, respect and trust and that is free from mistreatment, discrimination and harassment. Questions, complaints, issues and concerns regarding the above may be directed to your manager or supervisor, or Renisha Gibbs at (850) 644-8082.

Persons with Disabilities

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, *108 Student Services Building*. For matters related to employment and reasonable accommodations, contact the Florida

State University Human Resources/Office of Diversity Enhancement and Compliance, *University Center, Bldg. A, Suite 6200*, or call (850) 644-8142.

HIV/AIDS Policy

Students, employees, and applicants for admission or employment at 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 Florida Department of Education Division of Colleges and Universities and the University concerning HIV/AIDS and coordinating the University's efforts in educating the University community on the nature and prevention of the disease. In addition, the Florida State University Committee on HIV/AIDS meets as needed to consider special problems related to HIV/AIDS that require University action.

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

Florida State University has designated HIV/AIDS counselors who are available to the University community. These counselors are: Celeste Paquette, M.D., Medical Director, Thagard Student Health Center, (850) 644-2026; James Hennessey, Ph.D., Student Counseling, (850) 644-2003; and Brandi Williams, (850) 644-8871. Anonymous HIV testing is available for students and staff at Thagard Student Health Center. Any interested individuals should call (850) 644-8871 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 by 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 Audit Services:** The Office of Audit Services (OAS) is charged with receiving and investigating sexual harassment complaints as set forth in this policy and shall maintain the records pertaining thereto. Within the OAS, 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:
- Use of gender-based verbal or written language, including electronic communications offensive or degrading to a person of that gender, whether or not the content is sexual
 - Inappropriate display of gender-based pictorial images offensive or degrading to a person of that gender, including but not limited to sexual posters, photographs, cartoons, drawings, or other displays of sexually suggestive objects or pictures
 - Use of inappropriate gestures or body language of a sexual nature, including leering or staring at another
 - Unwelcome requests or demands for sexual favors or unwelcome sexual advances
 - Inappropriate nonconsensual touching of another's body, including but not limited to kissing, pinching, groping, fondling, or blocking normal movement
 - Sexual battery. (**Note:** Some acts of sexual harassment may also constitute violations of criminal law, e.g., sexual battery, indecent exposure, sexual abuse, etc. In such instances, please refer to the FSU Sexual Battery Policy.)
5. **Disciplinary and Other Actions:** Sexual harassment is prohibited by 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.
- Disciplinary Actions.** Any employee who has sexually harassed another employee or a student, retaliated against such person for bringing a complaint of sexual harassment, or otherwise violated this policy shall be guilty of misconduct and subject to disciplinary action up to and including dismissal, in accordance with applicable law, rules, policies, and/or collective bargaining agreements. In addition, any student who has sexually harassed another student or an employee, retaliated against such person for bringing a complaint of sexual harassment, or otherwise violated this policy may be subject to disciplinary action up to and including expulsion, pursuant to the Student Code of Conduct. The term "employee" includes all persons employed by the University including faculty and graduate teaching assistants.
 - 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 OAS, who then will proceed as appropriate. Any supervisor who has witnessed or becomes aware of the alleged occurrence of sexual harassment by, or who receives a complaint of sexual harassment involving a person within that supervisor's purview is required to take prompt corrective action as appropriate, and to report the matter, if possible, within two work days to the OAS. Failure of the supervisor to take appropriate corrective action or to report the incident shall be a violation of this policy and shall constitute misconduct subject to disciplinary action as described in Section (5) above.
- Note:** For the purposes of this policy, the term "supervisor" shall be deemed to include vice presidents, deans, directors, department chairs, unit heads, supervisors, principal investigators, etc.; faculty when acting in a supervisory capacity or within the faculty-student role; and graduate research assistants, teaching assistants, lab technicians, residence hall coordinators, etc.
9. **Complaint Procedure:**
- 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 Audit Services
 - The Office of the Dean of the Faculties
 - The Office of the Dean of Students
 - The Department of Human Resources
 - A student's college dean
 - An employee's immediate or next immediate supervisor.
 All complaints should be filed in a timely manner. Complaints filed for acts that occurred more than one year from the filing date of the complaint will generally not be investigated unless appropriate in the judgment of the OAS.
 - Preparing a Complaint:** The complainant should provide the following information to facilitate a prompt and thorough investigation:
 - The names, addresses, telephone numbers, administrative unit, and position or status of the complainant and the respondent, if known
 - Specific acts alleged, including dates, times, and locations
 - Names, addresses, and phone numbers of potential witnesses
 - The effect the alleged acts have had on the complainant
 - Actions the complainant may have taken to attempt to stop the harassment
 - Complainant's suggestion of proposed action to address or resolve the harassment
 - Other information the complainant believes is relevant.
 - Transmitting a Complaint to the OAS:** The complaint shall immediately be forwarded to the OAS. 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 OAS 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 OAS will refer the matter to the Office of the General Counsel for appropriate action. If the OAS determines that the alleged perpetrator is a student or employee, the OAS 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 OAS 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 OAS 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 OAS will elicit from the complainant, proposed actions the complainant believes are necessary to address or resolve the alleged harassment. The OAS 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 OAS 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 OAS 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 OAS 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 OAS:** The OAS 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 OAS'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 OAS of the outcome. The OAS 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 OAS 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 Florida State University in hard copy (policy brochures, student handbooks, the *General and Graduate Bulletins*, etc.), electronic format (<http://www.auditservices.fsu.edu>), 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 OAS.
 14. **Applicability:** This policy supersedes any and all prior University policies regarding complaints of alleged acts of sexual harassment.
 15. **Effective Date:** The effective date of this policy is July 1, 1998 as amended December 31, 2002, and January 6, 2004.
 16. **Where To Go For Help:** Any member of the university community may report sexual harassment to the Office of Audit Services, 407 Westcott Building, (850) 644-6031, or by calling the Florida State University Sexual Harassment Hotline, (850) 644-9013. Staff is also available in the following offices to assist victims of sexual harassment: A student victim may report to Dean of Students, 4322 University Center A, (850) 644-2428; a faculty victim may report to Dean of Faculties, 314 Westcott Building, (850) 644-6876; an A&P, USPS or OPS victim may report to Human Resources, 6224 University Center A, (850) 644-6475.

Mission Statement

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

Mission: 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, 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 College 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 College of Criminology and Criminal Justice, the College 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 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, Florida State University attracts students from every county in Florida, every state in the nation, and 133 foreign countries. The University is committed to high admission standards that ensure quality in its student body, which currently includes 89 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 20.2 percent of the student body, are enrolled in over 205 graduate degree programs of which 73, covering 138 fields, are doctoral. The median age of all students is 23.1 and approximately 6.7 percent, mostly graduate students, are over 31 years old.

A Summons to Responsible Freedom

Values and Moral Standards at Florida State University

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

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

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

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

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

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

Florida State University is committed to nondiscrimination in matters of race, creed, color, sex, 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 that 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 that lead to the achievement of these personal and social values. Responsible student behavior requires observance of the Student Conduct Code, which is based on respect for the dignity and worth of each person and the requirements for successful community life.

Relations among all persons should be characterized by mutual respect and equality. Sexism, sexual harassment, and sexual coercion of any sort are wrong and constitute a violation of fundamental moral requirements and state law. Minimally responsible behavior requires that no one take sexual advantage of another.

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

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

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

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

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

Policy for the Use of Photographs and Videos in University Publications

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

Integrity in Research and Creative Activity

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

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

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

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

The official method of communication at Florida State University is the UCS 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. 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.

Student Addresses

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

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

Florida State University Alcohol Policy

Florida State University has an Alcohol Policy that delineates where and under what circumstances alcohol is permitted on campus. Please visit the following link: www.tshc.fsu.edu/par/documents/FSUAlcoholPolicy.pdf to reference information regarding this policy.

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

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

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 judgment, 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 commonly, 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, judgment, memory, and motor skills. Even low doses significantly impair the judgment 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 dependence. 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 withdrawal 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 inhalants. HIV infection also is spread widely among intravenous drug users. Even infrequent use of illicit drugs can result in physical afflictions, such as hangovers, cardiovascular damage, digestive problems, tremors, impaired sexual response, and injuries due to lost coordination. Other possible effects include reduced alertness and impaired performance at school or work, interpersonal conflicts, and financial difficulties. Dependence and addiction are constant threats to users of illicit substances. Regular abuse of these substances generally exposes users to criminal elements, which may lead to involvement in further criminal activities.

Educational and Counseling Resources and Support

- In support of responsible management of alcohol, the university provides information in the form of books, pamphlets, videotapes and computer resources through the Office of Health Promotion at the Thagard Student Health Center [644-8871]. The Office of Resident Life [644-2860] and the FSU Police Department [644-1234] also sponsor educational programs.
- Volunteer opportunities for students seeking to work toward greater alcohol responsibility are available through KARMA (Knowing About the Responsible Management of Alcohol and other drugs) Peer Educators [644-8871], and PAR (Partnership for Alcohol Responsibility) [644-6489] at Thagard Student Health Center.
- SMART (Students Making Alcohol and Other Drug Responsibility Theirs) Choices consists of two two-hour class sessions and an interactive on line program at Thagard Student Health Center that presents the legal and personal consequences of substance abuse. Students who are sanctioned by the Office of Student Rights and Responsibilities [644-2428, Dean of Students Office] or University Housing [644-2860] for on- or off-campus violations of the University's alcohol and drug policy must complete the course. The purpose of the course is to introduce the student to a process of self-examination that may lead to improved decision making and behavior change.

- The Learning Resources Center of the College of Nursing has books, slides and videotapes on alcohol and other substances which are available to instructors in the College of Nursing. All other staff or faculty would need approval from the Dean of the College of Nursing to access these resources [644-1291].
- The Digital Media Center provides media resources, which include listings on alcohol topics, to all campus approved departments and organizations. There is no charge for this service when it is used for regularly scheduled classes [644-5924; Web site is <http://www.lib.fsu.edu/digitalmc.html>].
- The University Counseling Center provides counseling services to students. These services are free to students who have paid their fees, and include alcohol and other substance abuse counseling [644-2003]. Counseling services are also provided by the Marriage and Family Therapy clinic, where fees are based on annual income [644-1588].
- The Human Services Center is a training clinic within the College of Education. Counselors are graduate students with counseling majors. Fees are based on a sliding scale [644-3854, 644-3857].
- The Psychology Clinic is also a training clinic. Counselors are graduate students in clinic psychology programs. They provide one-on-one psychology services (no support groups) to both students and the community. Fees are based on a sliding scale [644-3006].
- The Employee Assistance Program (EAP) at Florida State University was established to assist employees with behavioral, medical and substance abuse problems affecting employment. Employees can enter the program through self-referral or supervisory referral. The EAP functions as a coordinator of counseling and other appropriate services available both within the university and the community [644-2288].
- Big Bend Helpline 211, Inc. [www.211bigbend.org.] is a 24-hour hotline and has the most extensive and current listing of counseling and support services (AA, ALANON, etc.) in the Tallahassee community [211 or 224-6333.]

University Disciplinary Sanctions for Alcohol/Drug Offenses

The disciplinary function at 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 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

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

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

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

In February 1857, the institution began offering postsecondary instruction to male students as the Seminary West of the Suwannee River. The school first became coeducational the following year when it absorbed the Tallahassee Female Academy, begun in 1843 as the Misses Bates School. Thus the West Florida Seminary, founded in 1851, began operating in 1857, only 12 years after Florida achieved statehood. It was located on the hill where the Westcott Building now stands, which has been the site of an institution of higher education longer than any other site in Florida.

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

Following the war, the institution entered a period of growth and development. In 1884 the first diplomas, Licentiate of Instruction, were awarded, and by 1891 the school 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 that grew to become the third largest women's college in the nation during the 1930s. The College became fully accredited in 1915, and a chapter of the national honor society of Phi Kappa Phi was installed in 1925, the year after the College was placed on the list of standard colleges and universities approved by the Association of American Universities and became a member of the Association of American Colleges. In 1935 the first chapter of Phi Beta Kappa in the state, Alpha Chapter of Florida, was installed at the College, a mark of its status as a true liberal arts college.

The year 1947 saw many changes. Demand by returning World War II veterans had brought men back to the campus in 1946 with the establishment of the Tallahassee Branch of the University of Florida and in 1947 caused the Legislature to return Florida State College for Women to coeducational status and name it Florida State University. A permanent president's residence was acquired. The student body, numbering 4,056, chose a new alma mater and selected the Seminole as its mascot. The Flying High Circus was born, and football was started again when the first home game since 1905 was played in October. Three years later Campbell Stadium was built. The first Student Union was established and housed in the "O Club" on west campus, a former Army air base that 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 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 candidate graduated in 1970. Programs in African-American studies and women's studies were established. Continuing the liberal arts tradition begun in the 1890s, the Liberal Studies Program required of all undergraduates was expanded and strengthened.

In each succeeding decade, Florida State University has added to its academic organization and now comprises 16 colleges. It has expanded from the original few acres and buildings to over 513 buildings on nearly 1,432.2 acres, including the downtown Tallahassee main campus of 450.5 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. 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 2006 enrollment totaled 40,474 students from all 50 states, the District of Columbia, and 133 countries. The breakdown by class included 7,241 freshmen, 5,934 sophomores, 8,671 juniors, 9,212 seniors,

758 law students, 1,242 special students, and 8,174 graduate students. Of the student body, 43.6% are men, 56.4% women. The faculty totaled 2,291.

University Organization

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. Florida State University's Board of Trustees sets the University's policies and goals and serves as its legal owner and final authority responsible for efficient and effective use of its resources.

The main campus of the University is located in Tallahassee, the state's capital. 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 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 administers all faculty personnel matters, including faculty development and welfare; monitors all academic rules and regulations, including those related to academic integrity and grade appeals; and facilitates the operation of the Faculty Governance System of the University, the 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 Financial Aid, and the Office of Admissions and Records.

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 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 not only has 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 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 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 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 1900s. The College of Music and College of Visual Arts, Theatre, 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 fine arts colleges 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.

Florida State University's Museum of Fine Arts, a division of the College of Visual Arts, Theatre, 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 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 College of Music. The research equipment, laboratories, studios, and recital halls enhance the education of the graduate performers and composers and the performance of the college's 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 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 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 15 programs leading to the bachelor's degree, 20 programs leading to the master's degree, and two programs 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

The academic organization of the University comprises 16 colleges. One of these, the College of Engineering, is a joint program of the Florida Agricultural and Mechanical University (FAMU) and Florida State University. The colleges offer courses of study in 26 major disciplines. In addition to the associate in arts (AA) certificate, they offer 94 authorized baccalaureate degree programs covering 194 fields, 102 authorized master's degree programs covering 197 fields, 28 authorized advanced master's and specialist degree programs covering 35 fields, two authorized professional degree programs covering nine fields, and 73 authorized doctoral degree programs covering 138 fields. The following outlines the academic divisions:

College of Arts and Sciences

Departments: Aerospace Studies; Anthropology; Biological Science; Chemistry and Biochemistry; Classics; 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; Computational Science; Critical Theory; English and Business; Foreign Language and Business; Geophysical Fluid Dynamics; History and Philosophy of Science; Humanities; Iberian Studies; 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 and Program in Business Law

Interdisciplinary Programs: Business Administration and Law; Multinational Business

College of Communication

Departments: Communication; Communication Disorders

College of Criminology and Criminal Justice

College of Education

Departments: Childhood Education, Reading, and Disability Services; Educational Leadership and Policy Studies; Educational Psychology and Learning Systems; Middle and Secondary Education; Sport Management, Recreation Management and Physical Education

FAMU—FSU College of Engineering

Departments: Chemical and Biomedical 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

College of Information

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

College of Motion Picture, Television, and Recording Arts

College of Music

Interdisciplinary Program: Music Research

College 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; Economic Policy and Government; Russian and East European Studies; Program in Social Science; Urban and Regional Planning and Public Administration

College of Social Work

College of Visual Arts, Theatre, and Dance

School: Theatre

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

Interdisciplinary Program: Arts Administration

Institutes and Research Centers

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

The following are the State Board of Education's approved institutes and research centers:

Professional Development and Public Service

Center for Intensive English Studies

Center for Professional Development and Public Service

Program Development and Faculty Support

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 Information, Training, and Evaluation Services

Center for Prevention and Early Intervention Policy

Florida Center for Public Management

Florida Conflict Resolution Consortium

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 (ISPA)

John Scott Dailey Florida Institute of Government

The Florida Center for Prevention Research

International Programs

Florida–Costa Rica Linkage Institute (FLORICA)

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

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

Center for Hispanic Marketing

Communication Research Center

International Center for the Advancement of Political Communication and Augmentation

L.L. Schendel Speech and Hearing Clinic

College of Criminology and Criminal Justice

Center for Criminology and Public Policy Research

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

Melvane Draheim Hardee Center for Women in Higher Education

FAMU—FSU College of Engineering

Center for Intelligent Systems, Control and Robotics

Sustainable Energy Science and Engineering Center

College of Human Sciences

Center for Family Services

Center for Marriage and Family Therapy

Florida Inter-University Center for Child, Family and Community Studies

Florida State University Family Institute

Resource Materials Center

College of Information

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 Medicine and Public Health
Center on Terrorism and Public Health

College of Music

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

College of Social Sciences

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

College of Social Work

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

College of Visual Arts, Theatre, and Dance

Maggie Allesee National Center for Choreography

Provost's Office

Institute for Academic Leadership

Office of the Vice President for Student Affairs

Florida Center for Interactive Media

Office of Research

Center for Advanced Power Systems (CAPS)

Other Instructional Units

Academic and Professional Program Services

Director: William H. Lindner; **Associate Director:** Susann Rudasill

The Center for Professional Development and the Office for Distributed and Distance Learning have merged into one comprehensive service unit, **Academic and Professional Program Services (APPS)**, to better serve faculty, students, staff, and alumni of the University, as well as students of all ages in the local, state, national, and international communities.

APPS provides support for all users of the University's learning management system (<http://campus.fsu.edu>) by upgrading and maintaining the technology infrastructure and by developing software applications to increase efficiency. All APPS programs and services support faculty members in their commitment to excellence in teaching, research, and creative activities. Experts in instructional design, technology applications, and digital media assist faculty in the design, delivery, and assessment of onsite and online instruction. The Center for Assessment and Testing provides assistance with the administering of tests and evaluations. Lifelong learners are offered continuing education and outreach activities such as academic and professional programs, as well as technology training delivered in the classroom and online. Continuing education coordinators assist with program development, budgeting, registration, logistics, technical assistance, and on-site management.

The various sections of APPS are, at present, in three separate locations: 1) the **Center for Teaching and Learning, Academic Program**

Services, and the **Learning Management Support Services and Help Desk (Blackboard)** are on the 3rd and 4th floors of *University Center, Building C*; 2) **The Center for Assessment and Testing** is in *University Center, Building C* across the courtyard on the 1st floor; and 3) **Professional Program Services** is in the *Turnbull Conference Center*, situated on the southeast edge of the campus, nearest the Capitol. The Turnbull Center offers an auditorium, meeting rooms, and a dining room to facilitate meetings, workshops, and symposia for the Florida State University community and general public. The *University Center* locations may be reached by phone at (850) 644-8004 or <http://apps.fsu.edu>; and the *Turnbull Center* location at (850) 644-3801 or <http://learningforlife.fsu.edu>.

Professional Program Services

Continuing Education (CEUs) and Teacher Re-Certification. In conjunction with the University's academic departments, APPS coordinates degree and certificate programs for non-traditional, part-time students. Programs can be found throughout Florida, and some are delivered through distance technologies. Opportunities for teacher re-certification and continuing education units (CEUs) are provided throughout the year, as well as sponsorship of tuition scholarships for adult students wishing to return to school.

Non-Credit Programs. APPS develops, promotes, and administers a range of noncredit programs and certifications in traditional classroom settings and online. Lifelong learners can remain current in their fields and maintain licensing and continuing education requirements through career skills development. Online learning makes it possible for adult learners to study in the comfort of their homes or offices.

Technology Training. APPS offers industry-certified training programs that can be customized to individual learner or employer needs. Course offerings may include Basic Technology, which covers several office programs; and Oracle, MCSE, and MOUS. Classes are held at the Turnbull Center, but technical training can be tailored for a client's workplace to suit specific needs. The FSU Webmaster Certification Online is available 24 hours a day, seven days a week on the Internet.

Academic Program Services

On-Campus Students. Access and use of FSU's learning management system is provided with both onsite and online contacts for technical support and resources for learning via the Web. Instruction in using the University's online learning management environment and its many tools is available at <http://apps.fsu.edu>.

Distance Students. APPS provides online guidance to students and departmental staff, from application and acceptance to any of the 3 undergraduate online degree programs and 15 graduate online degree programs, to orientation to the University, which addresses scheduling of courses, instruction on navigating course Web sites, and other tools necessary for their success. Students receive individualized attention from instructors, and some courses have mentors who guide students through course work and monitor their progress.

Center for Teaching and Learning (CTL). Faculty members can further their planning, teaching, and technology skills through workshops, classroom observations, and individual consultations. A variety of services are provided, from producing online course components to Web site design and Webcasting, including digital audio and video production and streaming. Graduate teaching assistants (TAs) are aided in improving their academic leadership and teaching skills through the Program for Instructional Excellence (PIE).

Learning Management Support Services and Help Desk (Blackboard). Management of all maintenance and upgrades, technology training on upgrade enhancements, academic help desk, and development of applications to further enhance the portal infrastructure for faculty, student, and staff use.

Center for Assessment and Testing (CAT). Faculty services include: mark-sense scanning; test scoring and analysis; administering of University and department faculty evaluation instruments (SPOT, e-SUSSAI); and technical support for data collection and analysis in research. Student services include: administering test taking for many national and state testing programs (e.g., CLAST, FTCE, ACT, SAT, LSAT, MCAT, and TOEFL); and providing proctored testing for distance-learning students. <http://learningforlife.fsu.edu/cat>.

The Florida Center for Public Management

Director: Shawn Baldwin

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

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

Learning Systems Institute

Director: Laura B. Lang

Associate Directors: Tristan Johnson, Rabieh Razzouk, Mike Spector

The Learning Systems Institute is a multi-disciplinary research and development unit dedicated to improved human performance. The Learning Systems Institute (LSI) is a recognized world leader in the improvement of teaching, learning, and performance systems in school, business, industry, and military settings. LSI has generated more than \$175 million in externally funded research over a 39-year period, 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. Pre-K–20 education research and reform with an emphasis on reading, mathematics, and science
2. Learning communities and research
3. Learning and performance support systems research and implementation
4. Multidisciplinary research related to the study of expert performance
5. International development through improved learning systems
6. Reading research
7. Education policy studies and research

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

Institute for Cognitive Sciences

Director: Dr. Michael Kaschak

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

L.L. Schendel Speech and Hearing Clinic

Director: Juliann Woods, PhD; **Associate Director:** Janice McClung, MS

The dual mission of the speech and hearing clinic is to provide effective community service to improve the communication abilities of

clients, and to provide a teaching and clinical research laboratory to develop exemplary assessment and treatment procedures for use by Florida State University students in speech language pathology and audiology. Specific services include:

- Comprehensive Speech-Language Assessment and Therapy
- Hearing Assessment and Services Related to Hearing Impairment
- Assistive Communication Lab
- Dialect/Accent Evaluation and Reduction

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

Fees vary according to the nature of services. Further information is available by writing or calling: *L.L. Schendel Speech and Hearing Clinic, 107 Regional Rehabilitation Center, Florida State University, Tallahassee, FL 32306-1200; (850) 644-2238 (Voice and TDD), Fax (850) 644-8994.*

The Florida State University Center for the Performing Arts

Director of the Conservatory for Graduate Actor Training: Greg Leaming

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

Libraries

Florida State University's 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. Florida State University's libraries include the Robert Manning Strozier Library (the main library), the Paul A.M. Dirac Science Library, the Harold Goldstein Library, the Warren D. Allen Music Library, the Law Library, and the College of Medicine Medical Library. Library materials and services also are available at Florida State University's off-campus sites, including the Ringling Museum of Art, the Panama City, FL campus, the Republic of Panama branch campus, and the study centers in London and Florence.

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 approximately 2.9 million books and periodicals; over 800,000 government documents; more than 9,000 films, videos, and DVDs; and over 800,000 microforms. Access to over 300 subscription databases, 274,000 e-books, and more than 29,000 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 Web site and provides access to all the University's collections. 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 using chat and e-mail, by telephone, and in the library.

A state-of-the-art media center in Strozier Library provides equipment and facilities for listening to, viewing, and editing 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 of 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 as well as United Nations documents. Its special collections department includes rare and unique materials for research and study. The library's Web site is located at <http://www.lib.fsu.edu>

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

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

The **Harold Goldstein Library**, located in the College of Information, 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 by the College of Law, has a collection containing more than 500,000 volumes and volume equivalents, and approximately 4,000 subscriptions. Legal research is complemented by an array of electronic databases, including the LexisNexis 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 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 61,000 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 Web site is at <http://www.ringling.org>.

The **FSU-Panama City (FSU-PC) Academic Resource Center (ARC)** is the on-campus location for access to quality electronic information, research materials, and research help. The ARC is equipped to provide access to the University libraries' electronic resources, databases, library catalogs, and other information. Access to these electronic resources also is available from off campus. The ARC librarian provides research assistance in person, by phone, and by e-mail. ARC services complement existing library services provided by the Gulf Coast Community College (GCCC) Library. Through an arrangement with GCCC, the GCCC Library houses the FSU-PC collection of books and journals. For more information, go to <http://www.pc.fsu.edu/arc>.

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

Graduate Education

Dean of Graduate Studies: Nancy Marcus, 408 Westcott Building

Graduate studies at Florida State University emphasize advanced degree programs that entail extensive research activities and preparation for careers in science, the arts, the humanities, 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 faculty committee appointed by the Faculty Senate of the University, is responsible for the determination of University-wide policies for the governance of graduate education. Within these policies and standards, deans of the various colleges administer their individual graduate programs.

The mission of the Office of Graduate Studies is to advance the quality and Integrity of graduate education.

The Office of Graduate Studies:

- Assists Florida State University graduate students by providing advice on general academic matters, University-wide degree requirements, and information on the availability of financial assistance, including assistantships, fellowships, and scholarships; by granting approval for thesis and dissertation; and by fostering the development of their skills and knowledge to succeed as leaders in a global community
- Interacts with the Office of the Dean of the Faculties and the Graduate Policy Committee to establish and provide oversight of policies affecting graduate education at the University
- Collaborates with Florida State University units such as the International Center, Career Center, and Health Center to address graduate student needs
- Works with national organizations such as the Council of Graduate Schools, the National Association of State Universities and Land Grant Colleges, and the National Research Council to promote the importance of graduate education

There are approximately 8,174 graduate and professional students enrolled at Florida State University. These students come from approximately 133 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, 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 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 (for graduate students), Academic Common Market, and Cooperative Programs

within the State of Florida, Division of Colleges and Universities. Florida State University is a member of the University Research Association; the Oak Ridge Associated Universities, Inc.; The University Corporation for Atmospheric Research; The Southeastern Universities Research Association; EDUCOM: The Interuniversity Communications Council; the American Association for Laboratory Animal Science; the State University System's Institute for Oceanography; the University Space Research Association; and CAUSE: The Association for the Management of Information Technology in Higher Education.

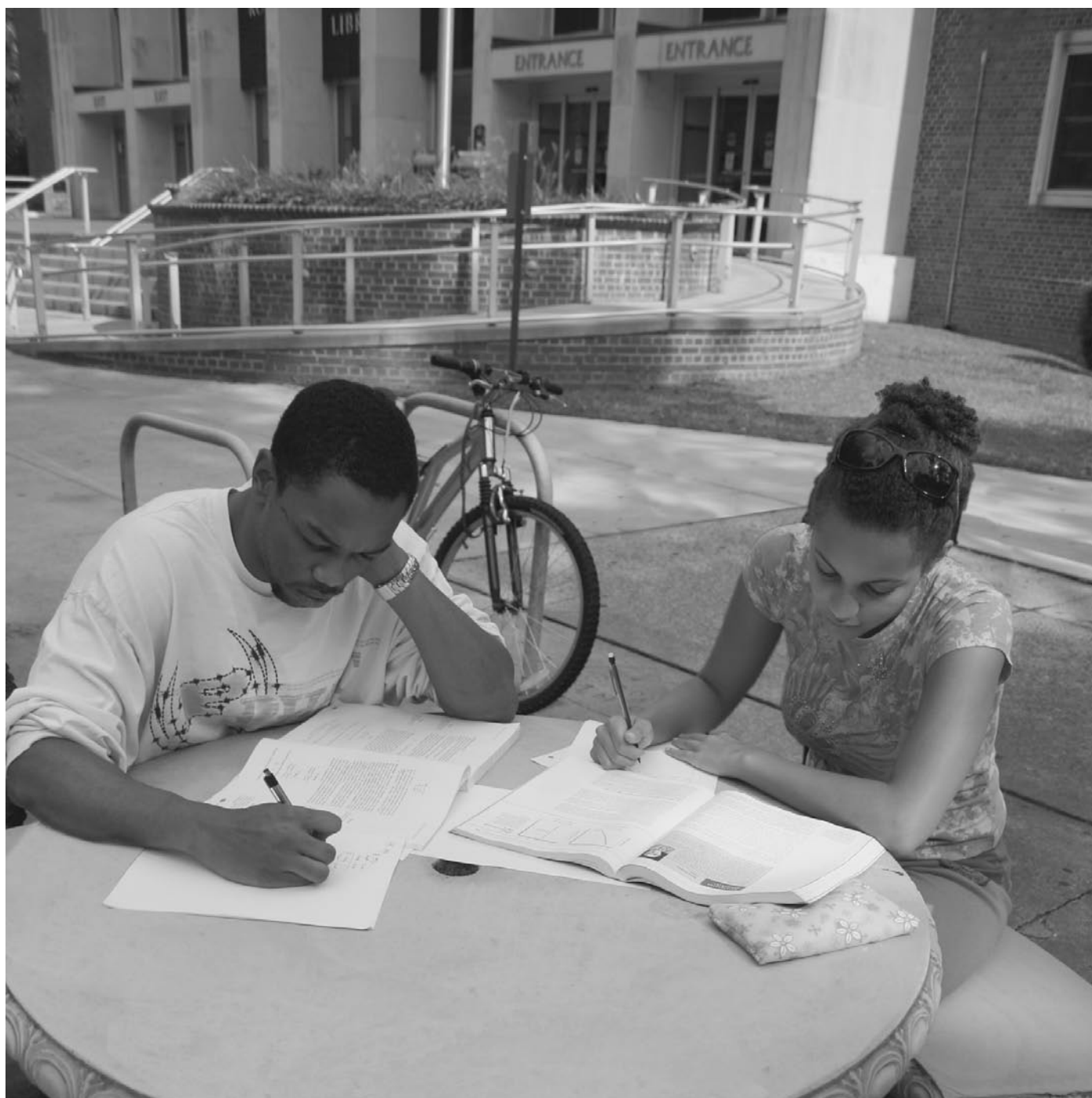
Accreditation

Florida State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (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 chapters in this *Graduate Bulletin*.

Carnegie Foundation Classification

The Carnegie Foundation, in its 1994 report, ranked Florida State University in the Research Universities I category, its highest category for a graduate-research university. 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, Florida State University has built a reputation as a strong center for research and creativity in the sciences, the humanities, and in the arts. During fiscal year 2005, Florida State University's faculty generated a record \$190 million in funding to supplement state funds used for research. These external funds, derived through contracts and grants from various private foundations, industries, and government agencies, are used to provide stipends for graduate students, to improve research facilities, and to support the research itself.

Many members of Florida State University's faculty are renowned scholars in their fields. In the natural sciences, Florida State University is perhaps best known for its basic research programs in physics, 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. Since 1982, Florida State has operated a College of Engineering as a joint program with Florida A&M University, an enterprise combining strengths in mechanical, electrical and computer, civil, environmental, chemical and biomedical, and industrial and manufacturing engineering.

Special Programs

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

This unique facility supports an extensive in-house research program that advances its scientific and technical capabilities. The in-house research program is built around leading scientists and engineers who concentrate on the study of strongly correlated electron systems, molecular conductors, magnetic materials, magnetic resonance, cryogenics, and new approaches to measuring materials properties in high magnetic fields. Research at the laboratory is opening new frontiers of science at high magnetic fields, which have enormous potential for commercial and industrial applications. The laboratory also has one of the world's foremost magnet and science technology groups, which designs and builds this new generation of magnets. In 1999, the lab brought online a new 45-Tesla hybrid magnet, the most powerful magnet of its kind in the world. In 2004, the laboratory commissioned the world's first ultra-wide bore 900 MHz NMR magnet for chemical and biomedical research. Another record fell in 2005, when lab engineers completed the 35-T—the world's highest field "resistive" magnet. The National High Magnetic Field Laboratory has many exciting research opportunities for graduate students who wish to pursue research at the edge of parameter space in any area of science utilizing these world-class resources and instrumentations.

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

The computations that enable studies in diverse areas such as predicting the winds in a hurricane or designing nano-composites depend on the invention, implementation, testing, and application of algorithms and software that computers use to solve scientific and engineering problems. This is the work of computational scientists and forms the basis for the missions of the SCS. To accomplish these missions, the SCS brings together diverse faculty from across campus who are able to interact in a synergistic manner so that advances in the computational science of one discipline can influence advances in other disciplines.

The **Center for Materials Research and Technology (MARTECH)** is a collaborative program in materials science involving members of the University's biology, chemistry and biochemistry, engineering, and

physics departments. One current focus of the center is the integration of hard and soft materials for future spintronics and biological applications. The center's rapidly expanding facilities include several thin-film preparation labs, a light-scattering 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** is highly ranked nationally, with emphasis on nuclear structure physics; nuclear astrophysics; radioactive beam studies; studies of nuclear reaction mechanisms using polarized Li beams; accelerator-based atomic physics; electron scattering; hadronic nuclear physics; and relativistic heavy ion reactions. A large part of the program in experimental nuclear physics uses Florida State University's Superconducting Linear Accelerator Facility, which ran its first experiment in 1987. The facility consists of a Super-FN tandem Van de Graaff electrostatic accelerator that injects into a heavy-ion superconducting linear accelerator. The facility utilizes state of the art instrumentation, provides forefront nuclear research capability, and is unique in the southeast.

Florida State University's Coastal and Marine Laboratory is located 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 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 **Center for Ocean-Atmospheric Prediction Studies**, located at the Don Fuqua Research Complex at Innovation Park, trains oceanographers, meteorologists, and scientists in related disciplines. Research at COAPS focuses on ocean and atmospheric dynamics and their applications to interdisciplinary studies. In particular, COAPS scientists specialize in the modeling of ocean and atmospheric dynamics; climate prediction on scales of months to decades; air-sea interaction and modeling; and predictions of socio-economic consequences of ocean-atmospheric variations. Studies of storm surges, their impacts on the shoreline, the history of coastal storms, shore characteristics, and beach erosion are conducted by the **Beaches and Shores Research Center** for the urgent preservation of Florida's beaches. The center contracts with the Florida Department of Environmental Protection and other agencies to furnish scientific underpinnings for the Florida Coastal Construction Control Line, and to foster good decision-making regarding coastal development, environmental protection, and prudent building practices.

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

Essential to geologic investigation of Antarctica and global climate change are the analysis and preservation of marine sediments collected on Antarctic research expeditions. The largest collection of southern

ocean sediment cores is located at the **Antarctic Marine Geology Research Facility** located at the University. This 40-year old, National Science Foundation-funded facility holds more than ten miles of Antarctic marine sediment cores and is an invaluable resource for scientists both on campus and throughout the world.

All aspects of child behavior and learning are researched in Florida State University's **Child Development Programs**. The programs provide research sites and laboratory settings in which faculty and graduate students may observe and work with young children.

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

Computing and information technology are widely used at Florida State University for both research and instruction. **University Computing Services (UCS)** manages a high speed network that connects computers throughout the University to each other and to the world. UCS also provides wireless connectivity to the network from most locations on the FSU campus. In addition to the global Internet, Florida State University participates in the Florida LambdaRail and the National LambdaRail project, a special high capacity state and national network for academic and research purposes.

UCS provides accounts for computer and Internet access to all students, faculty, and staff. UCS 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.ucs.fsu.edu>.

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

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

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

The John and Mable Ringling Museum of Art located in Sarasota, Florida, is the designated State Museum of Florida. In 2000, the Legislature

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

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

Research centers within the institute are designed to respond to public and private sector needs. Specialists in the fields of biology, chemistry, geography, education, planning, public administration, physics, economics, law, and other areas carry out the University's public service responsibility through programs in education, training, and applied research. The overriding objective is to successfully apply resources, human and technical, to policy problems within the state of Florida.

The institute provides university students the opportunity to work on specific projects in institute centers under the supervision of experienced faculty and staff. These projects provide training for students in problem-solving environments. Government agencies and private sector organizations benefit from this dynamic source of trained and skilled personnel.

Since 1951, students and faculty of Florida State University have benefited from its membership in **Oak Ridge Associated Universities (ORAU)**. ORAU is a consortium of 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, and faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines, including business, earth sciences, epidemiology, engineering, physics, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines.



INTERNATIONAL EDUCATION

International Commitment

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

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

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

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

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

Beyond Borders: International Service and Cultural Exchanges

Coordinator: TBD

Beyond Borders is a university-to-university exchange program that provides opportunities for students to engage in intensive, short-term intercultural experiences while performing some community service. Currently, Florida State University has exchanges with the University of Costa Rica, Atlantic Branch (Turrialba, Costa Rica); the University of the West Indies, Mona Campus (Kingston, Jamaica); and the Technical University in Dresden, Germany. Participants live with local families or in university facilities and serve as volunteers in projects organized by the host institutions. All Florida State University students are eligible to apply; groups are limited to 10-12 students. Check www.ic.fsu.edu/beyondborders/info.cfm for more information or email bb@admin.fsu.edu.

107 South Wildwood, Tallahassee, FL 32306-4240; (850) 644-1702
<http://www.fsu.edu/~fsu-isc>.

International Programs

Director: James E. Pitts;

Associate Director: Michele E. Ceci;

Assistant Directors: Mary A. Balthrop, Louisa E. Blenman, Joan W. Cassels

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

The University has operated international study centers in Panama City, Republic of Panama since 1957; in Florence, Italy since 1966; in London, England since 1971; and in Valencia, Spain since 2000. At each of these locations, courses are offered during the fall, spring, and summer semesters. In addition to FSU students, the centers are open to students from other U.S. institutions and throughout the world.

All of these Study Centers offer a broad curriculum, which includes courses that particularly lend themselves to the international location. In Florence, the courses focus on the areas of art history, classics, English writing, literature, history, humanities, Italian language, and politics. The London center offers courses in the areas of art history, education, English literature and writing, history, music, politics, social sciences, and theatre. In addition, the London Study Center also serves as a base of operations for a number of curriculum-focused programs. Students may pursue study on specific topics such as British television, English literature, communications, international affairs, choral and instrumental music education, global sport management, theatre, textiles, apparel, and merchandising. In Valencia, courses are offered in Spanish language, literature, and civilization as well as art, business, English literature, humanities, and music. In the Republic of Panama, the FSU-Panama campus offers courses in a variety of liberal arts disciplines including mathematics and the sciences. FSU-Panama also functions as a 2- or 4-year degree institution serving a large population of native Panamanians. International Programs also has an extensive internship program with internships in a variety of disciplines offered in London, Valencia, and Panama.

In addition to the Study Centers, International Programs offers programs in many other locations. These sites vary from year to year, but generally include programs in Australia, China, Costa Rica, Croatia, Czech Republic, Ecuador, France, Ireland, Japan, Russia, and Switzerland. These locations host a variety of study abroad opportunities ranging from broad curriculum offerings to faculty-led programs focusing on a particular area or major. International Programs is constantly adding to and updating the program offerings and locations. For the latest information, visit the Web site at <http://www.international.fsu.edu> or contact us: *International Programs, A5500 University Center Tallahassee, FL 32306-2420, (850) 644-3272, (800) 374-8581, intprog1@admin.fsu.edu.*

Other Programs

Archaeology Programs in Italy

Director: Nancy T. de Grummond

The Department of Classics conducts archaeological excavations at the Etruscan/Roman site of Cetamura del Chianti near Siena, Italy. Each summer the department sponsors a field school of approximately six weeks at Cetamura. The field school is open to students from colleges and universities throughout the state of Florida and constitutes a significant part of the master's degree program with a concentration in classical archaeology. For further information, contact the Department of Classics, 205 Dodd Hall, 644-4259, or visit our Web site at <http://www.fsu.edu/~classics/cetamura>.

Florida-Costa Rica Institute

Co-Director: Joan W. Cassels

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 state universities and 28 community colleges.

Florida–France Institute

Co-Director: Joan W. Cassels

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 governments and business to forge a network of partnerships with French educational, governmental, and private-sector institutions.

Law Program at Oxford

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. Visit our Web site at http://www.law.fsu.edu/academic_programs/international_law.

Center for Intensive English Studies

Program Director: Patrick Kennel

The **Center for Intensive English Studies** 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. The center also provides English-as-a-second-language services for the spouses of regular students at Florida State University, as well as for some already admitted international students who are experiencing difficulty in mastering the English language.

International Center

Please see the “Student Services” chapter of this *Graduate Bulletin* for information pertaining to the International Center.



ACADEMIC DEGREE AND CERTIFICATE PROGRAMS

Florida State University offers degree programs through the following colleges. Consult the college 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
Aquatic Environmental Science		M	
Biochemistry	B		
Biological Sciences	B	M	D
Biomedical Mathematics	B	M	D
Biostatistics		M	D
Chemical Physics		M	D
Chemical Science	B		
Chemistry	B	M	D
Classics	B	M	D
Greek	B	M	
Latin	B	M	
Computational Biology	B		
Computational Science		M	D
Computer Science	B	M	D
Creative Writing		M	
English	B	M	D
Geology	B	M	D
Geographic Information Sciences		M	
Geophysical Fluid Dynamics			D
History	B	M	D
History and Philosophy of Science		M	
Humanities	B	M	D
Latin American and Caribbean Studies	B		
Mathematics	B	M	D
Meteorology	B	M	D
Middle Eastern Studies	B		
Modern Language:			
French	B	M	D
French and Francophone Studies	B	M	
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
Science Teaching		M	
Secondary Science and/or Mathematics Teaching	B	M	
Statistics	B	M	D
Interdepartmental Certificate in Developmental Disabilities ⁴			
Certificate in Elementary School Science			
Certificate in Marine Biology and Living Resource Ecology			
Certificate in Performance Management (Psychology)			
Graduate Certificate in American and Florida Studies			
Graduate Certificate in Archival Studies (History)			
Graduate Certificate in Cognitive Science (Psychology)			
Graduate Certificate in Critical Theory (English)			
Graduate Certificate in Editing and Publishing (English)			
Graduate Certificate in Information Systems Security Professionals			
Graduate Certificate in Interdisciplinary Humanities			
Graduate Certificate in Latin American and Caribbean Studies			
Graduate Certificate in Museum Studies: Anthropology			
Graduate Certificate in Museum Studies: Classics			
Graduate Certificate in Museum Studies: History			
Graduate Certificate in Museum Studies: Humanities			
Graduate Certificate in Oceanography			

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	M	
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 ⁴			
Graduate Certificate in Digital Video Production			
Graduate Certificate in Hispanic Marketing Communication			
Graduate Certificate in Project Management			

College of Criminology and Criminal Justice

Criminology	B	M	D
Criminology/Public Administration		M ²	
Criminology/Social Work		M ²	
Combined Bachelor’s to Master’s Program		B/M	
Certificate in Corrections			
Certificate in Law Enforcement			
Certificate in Security Administration			
Certificate in Underwater Crime Scene Investigation, Undergraduate/Graduate			

College of Education

Adult Education		M/S	D
Counseling and Human Systems		M/S	
Counseling Psychology and Human Systems			D
Early Childhood Education	B	M/S	D
Educational Leadership and Policy		M/S	D
Educational Psychology		M/S	D
Elementary Education	B	M/S	D
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	
Interdepartmental Certificate in Developmental Disabilities ⁴			
Certificate in Special Event Management, Undergraduate/Graduate			
Certificate in Teaching English to Speakers of Other Languages, Undergraduate/Graduate			
Graduate Certificate in College Teaching			
Graduate Certificate in Early Childhood and Family Intervention			
Graduate Certificate in Early Childhood/Special Education			
Graduate Certificate in Educational Measurement and Statistics			

Graduate Certificate in Educational Policy
 Graduate Certificate in Educational Technology
 Graduate Certificate in Human Performance Technology
 Graduate Certificate in Human Resource Development
 Graduate Certificate in Institutional Research
 Graduate Certificate in Methods and Policy of Educational Accountability
 Graduate Certificate in Museum Studies: Recreation and Leisure Services Administration
 Graduate Certificate in Online Instructional Development
 Graduate Certificate in Program Evaluation

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
 Graduate Certificate in Water and Environmental Resources Engineering

College of Human Sciences

Athletic Training B
 Clothing, Textiles and Merchandising B M
 Exercise Science B M/S D
 Family and Child Sciences B M
 Family and Consumer Sciences Education B M
 Food and Nutrition B M
 Human Sciences B D
 Marriage and Family Therapy D
 Graduate Certificate in Food Safety, Quality, and Promotion
 Graduate Certificate in Apparel Design
 Graduate Certificate in Museum Studies: Textiles and Consumer Sciences
 Graduate Certificate in Retail Merchandising

College of Information

Information Technology B
 Library and Information Studies M/S D
 Graduate Certificate in Library Leadership and Management
 Graduate Certificate in Museum Studies: Information Studies
 Graduate Certificate in Reference Services
 Graduate Certificate in School Library Media Leadership
 Graduate Certificate in Web Design
 Graduate Certificate in Youth Services

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

Biomedical Sciences D
 Medicine P

College of Motion Picture, Television, and Recording Arts

Motion Picture, Television and Recording Arts B M

College of Music

Arts Administration M¹
 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 Theatre B

Music Theory B M D
 Music Therapy B M
 Opera Production M
 Certificate in Jazz Studies
 Certificate in Performance
 Certificate in Church Music, Undergraduate/Graduate Vocal or Instrumental
 Certificate in Early Music, Undergraduate/ Graduate
 Certificate in Piano Pedagogy, Undergraduate/Graduate
 Certificate in Special Music Education, Undergraduate/Graduate
 Certificate in World Music, Undergraduate/Graduate
 Music Therapy Equivalency, Undergraduate/Graduate
 Graduate Certificate in Arts Administration
 Graduate Certificate in College Teaching
 Graduate Certificate in Music Education and Leadership
 Graduate Certificate in Music of the Americas
 Graduate Certificate in Organ/Harpsichord Performance
 Graduate Certificate in Pedagogy of Music Theory

College of Nursing

Nursing B M
 Graduate Certificate in Nursing

College of Social Sciences

African-American Studies B
 Aging Studies M
 Applied Social Research M
 Asian Studies B M
 Demography M
 Economics B M D
 Geographic Information Sciences M
 Geography B M D
 International Affairs B M
 Political Science B M D
 Public Administration M
 Public Administration/Criminology M²
 Public Administration/Health Policy Research M²
 Public Administration/ Law M²
 Public Administration/Urban and Regional Planning M²
 Public Administration/ Social Work M²
 Public Health M
 Russian and East European Studies B M
 Social Science B
 Sociology B M D
 Urban and Regional Planning M
 Urban and Regional Planning/International Affairs M²

Certificate in African-American Studies
 Certificate in Aging Studies, Undergraduate/Graduate³
 Certificate in Demography
 Certificate in Emergency Management, Undergraduate/Graduate
 Certificate in Political Economy
 Certificate in Public Administration, Undergraduate/Graduate
 Certificate in Urban and Regional Planning
 Graduate Certificate in Dispute Resolution
 Graduate Certificate in Health Services Administration and Policy
 Graduate Certificate in Human Resource Management
 Graduate Certificate in Public Financial Management
 Graduate Certificate in Real Estate Development
 Graduate Certificate in Urban Design

College of Social Work

Social Work B M D
 Social Work/Criminology & Criminal Justice M²
 Social Work/Law M²
 Social Work/Public Administration M²
 Certificate in Aging Studies, Undergraduate/Graduate³
 Certificate in Arts and Community Practice, Undergraduate/Graduate
 Certificate in Child Welfare Practice, Undergraduate/Graduate
 Certificate in Leadership in Executive and Administrative Development in Social Work Graduate Certificate in Family Social Work Practice
 Graduate Certificate in Social Work in Disaster Recovery

College of Visual Arts, Theatre, and Dance

American Dance Studies		M	
Art Education	B	M/S	D
Art Therapy		M	
Arts Administration		M ¹	
Dance	B	M	
Graphic Design	B		
History and Criticism of Art	B	M	D
Interior Design	B	M	
Studio Art	B	M	
Theatre	B	M	D
Certificate in Arts and Community Practice: Art Education, Undergraduate/Graduate			
Certificate in Arts and Community Practice: Dance, Undergraduate/Graduate			
Graduate Certificate in Museum Studies: Art			
Graduate Certificate in Museum Studies: Art Education			
Graduate Certificate in Museum Studies: Art History			
Graduate Certificate in Museum Studies: Dance			
Graduate Certificate in Museum Studies: Interior Design			
Graduate Certificate in Museum Studies: Theatre			
Graduate Certificate in Theatre Administration and Management			

Interdisciplinary Programs

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

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

² Denotes dual degree program

³ Offered jointly by the College of Human Sciences, the College of Social Sciences, and the College of Social Work.

⁴ Offered jointly by the College of Arts and Sciences, the College of Communication, and the College of Education





ADMISSIONS

Director of Admissions: Janice Finney

Associate Director: Hege Ferguson

Assistant Directors: Melanie Booker, Donna Bostwick, Lori Hamilton, Amelia Mann, Leah Paul, Wendy Weldon

General Information

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 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 for 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 online at <http://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, as admission is not automatically deferred to a future term.

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

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

Every accepted student must complete in its entirety the student health history form, included in the admission packet and found online at <http://www.tshc.fsu.edu>. The form must be forwarded to the Thagard Student Health Center prior to registration. Florida State University reserves the right to cancel the admission or readmission of any applicant whose health record indicates the existence of a condition that may be harmful to members of the University community. **Effective Fall term, 2007, all students will be required to provide proof of adequate health insurance coverage.**

Required Documents

Applicants for graduate admission must submit the following:

Application for Admission

The completed application for admission and a nonrefundable \$30.00 (U.S. currency) processing fee payable to Florida State University should be submitted to the Office of Admissions by the appropriate deadline specified below. If payment is by check or money order, only those checks drawn on U.S. banks or 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 all **graduate applicants** are:

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

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 Examinations (GRE) are required of all applicants except those students requesting admission to the College of Business. Official test scores from the Graduate Management Admission 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 testing agency. Examinee copies are not considered official.

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 testing agency. Examinee copies are not considered official.

Departmental Requirements

All applicants should contact their academic departments for specific deadline dates and other possible departmental requirements, such as departmental application, statement of purpose (letter of intent), résumé or curriculum vitae, letters of recommendation, audition or portfolio, and application for fellowship or assistantship. These supplemental documents should be sent directly to the academic department.

Certification of Finances (International Applicants)

The University is required by immigration authorities to verify the financial resources of each applicant prior to issuing the Form I-20 or DS-2019; therefore, it is important that the applicant knows the costs of attending the University and has the necessary support funds 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.

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 within the State of Florida, 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 toward 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 a regionally-accredited institution may be considered for admission as a provisional graduate student. For information on provisional graduate status, see the subsection on 'Provisional Graduate Students' in this chapter.

International applicants whose native language is not English are required to have a minimum score of 550 on the paper-based, 213 on the computer-based, or 80 on the Internet-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 Florida State University must achieve a score of 1000 on the combined verbal and quantitative portions of the Graduate Record Examinations (GRE) or pass all sections of the Florida CLAST (waivers or other alternative means of meeting this requirement are not acceptable), or pass the General Knowledge Test.

All students planning to pursue a teacher education program at 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 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 Pre-service Teacher Preparation Programs.

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 Office of Admissions will notify the student by letter of acceptance in this category, and will outline the conditions of admission that must be met while in this classification. The 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 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.

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 subsection on 'Special (Non-Degree Seeking Students)' in this chapter.

Graduate work taken while in provisional status will apply automatically toward the student's graduate program if the student changes directly from provisional student classification to 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 remain in the Office of Admissions until the student is changed to regular graduate or post-baccalaureate special classification, or until the student is denied regular admission. All classification questions should be directed to the Office of Admissions.

Readmission

Returning graduate degree-seeking students who 1) have been absent from the University for two or more consecutive terms (including summer); 2) have been dismissed from the University and have been absent for two or more consecutive terms (including summer); 3) have withdrawn from the University and have been absent for two or more consecutive terms (including summer); 4) have earned a graduate degree from the University and wish to enroll in a second graduate program; or 5) have had their last term of enrollment at the University administratively cancelled and have been absent for two or more consecutive terms (including summer), must submit an application for readmission to the readmissions section of the Office of Admissions. Readmitted former students are subject to retention requirements in effect at the time of reentrance. In addition, students claiming Florida residency must reestablish their eligibility for this classification when applying for readmission.

Students who have attempted college work (including correspondence work) at any college or university since their last enrollment at Florida State University must have official transcripts sent to the readmissions section of 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.

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

The readmission application and all supporting documents should be submitted at least two (2) months prior to the beginning of the term for which readmission is desired. (Consult the "University Calendar" chapter of this *General Bulletin* for specific deadlines.)

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 or readmission 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.

Applicants who are denied admission or readmission to the University for judicial reasons may appeal by filing a written petition to the Office of Admissions.

Readmission After Multiple Withdrawals

When a student has withdrawn from the University three (3) or more times, subsequent readmission will first be considered by a committee whose charge is to assess the student's capability of making satisfactory progress toward the degree. This committee, appointed by the Council of Associate and Assistant Deans, will make a recommendation to the dean of the student's college, who will make the final decision.

Second Graduate Program

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

Special (Non-Degree Seeking) Students

A special student is a classification assigned to a non-degree-seeking student for registration privileges. Admission as a special student is subject to approval and may be open to post-baccalaureate students for either undergraduate or graduate course work provided the student is in good academic standing at the last attended institution. Applicants who have been denied admission as a degree-seeking student or who missed the deadline for submitting a degree-seeking application will not be considered for admission as a special student.

The completed special student application must be accompanied by a \$30.00 nonrefundable application fee, payable to Florida State University, and all supporting documents. Special student applications should be submitted for consideration one semester prior to the desired term of enrollment. Deadline dates are two (2) months prior to the beginning of each term. (Consult the "University Calendar" chapter of this *Graduate Bulletin* for specific application deadlines.) The Special Student section in 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 is reached.

A special student at Florida State University 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. Enrollment as a special (non-degree-seeking) student does not guarantee admission to a graduate program.

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.

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.ic.fsu.edu>), and the student must provide evidence of financial support and other information required by the United States government. In addition, the student must purchase or provide proof of health insurance coverage prior to enrollment. Foreign nationals on a student visa may not use the

special student status other than to fulfill prerequisite requirements or for summer enrollment if full-time status has been maintained during the academic year.

All registration by special students is on a space-available basis and, in some cases, may require departmental approval. For more complete details, see the "Academic Regulations and Procedures" chapter of this *Graduate Bulletin*.

Transient Graduate Students

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

Postdoctoral Students

A postdoctoral student may register for course work upon request of the department in which courses are to be taken. The postdoctoral forms, available through the Office of Admissions, will be signed by the departmental chair and sent to the Dean of Graduate Studies for postdoctoral registration approval. Registration is through the Special Students section of the Office of Admissions. While no application fee, transcripts, or GRE scores are required, tuition and fees must be paid.

Traveling Scholar Program

The University participates in a traveling scholar program that 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 Florida State University 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

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

If the student is unable to enroll for the term indicated in the notice of admission, the Office of Admissions should be informed immediately. If the student wishes to be reconsidered for a different term, the Office of Admissions must be advised in writing. The student also must notify the International Center of any changes by e-mail at ICAdmissions@admin.fsu.edu or by faxing a letter to (850) 645-2112.

Finances

Before a United States Consul will grant a visa, international applicants must prove that they will have sufficient funding to meet all of their expenses while studying in the United States. Applicants must explain the source of funds noted on their I-20 or DS-2019 form, and guarantee that they will receive funding for the duration of the program. 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 can be sent to students in 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. On-campus employment opportunities are limited, and most international students are not permitted to work off campus except under special 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. Students should have access to approximately half of the estimated total yearly amount at the beginning of each semester, since University fees must be paid upon registration at the start of each term. Students should also be prepared for initial expenses such as housing deposits, insurance, utilities, etc. The 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 (\$5,000 for spouse and \$3,000 for each child per year). Only a spouse and children may be classified as dependents. 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, and relationship to student (wife/husband, son, or daughter).

Registration Fees and Out-of-State Tuition*	\$15,732
Books and Supplies	1,000
Room and Board**	10,272
Insurance***	1,483
Total	\$28,487

*Graduate tuition and fees are based on two terms at 2006–2007 tuition rates. Students must register for a minimum of nine (9) hours each semester, unless their individual department requires more.

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

***The insurance rate used to compute costs is based on the rates for those 25 years and younger. For rates specific to age bracket, refer to <http://www.ic.fsu.edu>. Prospective and new students should refer to "Applying to FSU."

Note: International applicants are encouraged to visit the Web site <http://admissions.fsu.edu/intl/costs.htm> for current costs.

Passports and Visas

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

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

Before applying for a visa, all new F-1 and J-1 applicants must first pay a Student and Exchange Visitor Information System (SEVIS) fee of \$100.00. Instructions and online payment are available at <https://www.fnjfee.com/index.jhtml>. Detailed information is available on the Immigration and Customs Enforcement (ICE) Web site at <http://www.ice.gov/sevis/index.htm>, or the International Center Web site at <http://www.ic.fsu.edu>.

Federal policy requires that all applicants for U.S. visas have a personal interview with a consular officer and that certain categories of applicants undergo a security clearance. More information on travel to the U.S. can be found in the International Center Pre-Arrival brochure, which is mailed with the I-20 or DS-2019. The brochure is also available on the International Center Web site. If students are coming to the University specifically for the purpose of studying, they need to apply for a Student Visa (F-1 or J-1). It is granted upon presentation of a Certificate of Eligibility (Form I-20 for the F-1 visa and Form DS-2019 for the J-1 visa that is typically granted to government-funded students) and proof that sufficient financial support to cover all expenses for the entire period of study in the United States is available. Graduate students holding F-1 or J-1 visas 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 Requirement

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 before they will be permitted to register for classes or to continue enrollment. In addition, international students with "J" visa status who will be accompanied by dependents are required by federal regulations to purchase health insurance coverage for them. For more information regarding health insurance, contact the *Thagard Student Health Center*; (850) 644-4250, <http://www.tshc.fsu.edu>.

International applicants are required to complete and submit a health history form that describes previous illnesses and/or surgery. If students have ever had tuberculosis (or scars appearing on chest X rays) or other serious infectious diseases, they must have a thorough medical examination made before coming to the University, and must bring the report to campus. International applicants must be immunized, and must show proof of such immunization prior to registration. Students will not be

allowed to enroll until they have submitted the health history form and have purchased insurance or provided proof of health insurance that meets the minimum coverage required by the state of Florida.

Intensive English Program

English is the language of instruction and communication at the University. International applicants who lack sufficient English language preparation must correct this deficiency before being admitted to the University. Students may do this in their home country or in the United States at a school that offers an intensive English language program. Florida State University offers such a program through the Center for Intensive English Studies. Detailed information on the center may be obtained at <http://www.cies.fsu.edu>.

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

International Center

Upon arrival at FSU, international students must immediately check in with the International Center, have their immigration documents copied, and receive an orientation packet. In addition to the International Student Orientation, the Office of Graduate Studies and most departments hold orientation sessions for new graduate students the week before classes start. (Incoming international students are **not** allowed to register until they arrive in Tallahassee, present their immigration documents to the International Center, attend the International Student Orientation, obtain health insurance coverage, and submit their medical health history form to the Thagard Student Health Center.)

New federal reporting requirements make it essential for international students to enroll in a full course of study, stay in close communication with the international student adviser, and report any changes in their

program of study, such as changes in enrollment (dropping a class, withdrawing from the University, etc.), degree level, or major. It is essential that international students maintain their immigration status while in the United States and consult an international student adviser for any questions. For information about regulations that govern both F and J visas, benefits available to F and J students, online forms, and a checklist of rules to remember, international students should refer to the International Center Web site at <http://www.ic.fsu.edu/>.

Panama City Campus Admissions

The same policies, procedures, and requirements that pertain to the Tallahassee campus apply to the Panama City campus. Admission information can be obtained from: *Office of Admissions, Florida State University, 4750 Collegiate Drive, Panama City, FL 32405-1099* or at the following Web site: <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: *Florida State University, College of Law Admissions, P.O. Box 3061601, Tallahassee, FL 32306-1601* or visit <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: *Florida State University, College of Medicine Admissions, P.O. Box 3064300, Tallahassee, FL 32306-4300* or visit <http://med.fsu.edu>.





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

University Controller: Thomas Harrison

Associate Vice President for Budget, Planning, Financial Services: Rafael Alvarez

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 online account statement to verify the accuracy of the charges. The amount of tuition due is usually available during registration on 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 otherwise specified at time of payment.

Residency Requirements for Tuition Purposes

At Florida State University there are four offices responsible for the initial review of residency for tuition purposes under Section 1009.21, Florida Statutes and Florida Board of Governors Rule 6C-7.005. These offices are: 1) the Office of Admissions, 2) Law School Admissions, 3) College of Medicine Admissions, and 4) the Office of the University Registrar. The first three offices determine residency for all first-time-on-campus students; the Office of the University Registrar is the only office to which students can apply for changes in residency once they are enrolled. First-time-on-campus or returning students will be classified in accordance with the information on their applications, including the "Florida Resident Affidavit," providing no other information is available calling into question the information on the application.

To qualify as a Florida resident for tuition purposes in accordance with Rule 6C-7.005 of the Florida Board of Governors, students must: be a United States citizen, resident alien, parolee, Cuban national, Vietnamese refugee, or other refugee or asylee so designated by the Bureau of Citizenship and Immigration Services,

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 or legal guardian 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 that you occupy as your residence
 - c. Proof that the 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 that tend to establish the necessary intent to make Florida a permanent home and that the individual is a bona fide Florida resident, including the age and general circumstances of the individual
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 an active-duty member of the Armed Services of the United States stationed in Florida, or whose home of record is 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, or a spouse or dependent,

OR

Be an active-duty member of the armed services of the United States or a spouse attending a public community college or university within 50 miles of the military establishment where the member is stationed, if such military establishment is within a county contiguous to Florida,

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 twelve (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 one of 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 Post-Secondary Expense Program per Section 1009.988(2), Florida Statutes (prepaid ID card required),

OR

Be a McKnight Fellowship Recipient,

OR

Be an active-duty member of the Canadian military residing or stationed in Florida under the North American Air Defense (NORAD) agreement, or the member's spouse or dependent children, attending a public community college or university within 50 miles of the military establishment where the member is stationed,

OR

Be a U.S. citizen living outside the United States who is teaching at a Department of Defense Dependent School or at an American International School and who enrolls in a graduate-level program of education that leads to a Florida teaching certificate,

OR

Be an active-duty member of a foreign nation's military who is serving as a liaison officer and is residing in or stationed in this state, or the member's spouse or dependent children, attending a public community college or university within fifty (50) miles of the military establishment where the member is stationed,

OR

Be a linkage participant receiving partial or full exemptions under Section 1009.21, Florida Statutes, based on criteria approved by the Florida Department of Education per section 288.8175, Florida Statutes, which establishes linkage institutes between postsecondary institutions in this state and foreign countries,

OR

Be an active-duty 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 "Academic Calendar" appearing in the *Registration Guide* each term sets forth the beginning and ending dates of each term and all deadlines.

Assessment of Fees

The following fees and charges are based on current rates; however, since the *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 the "Money Matters" section of <http://www.studentsfirst.fsu.edu>.

Students are assessed fees based on the level of the course as established by the State Board of Education and the Florida State Legislature. **Fees applicable to 2007–2008 and 2008–2009 had not been confirmed by the Florida Legislature at the time of the publication of this document.**

Actual Course Fee Charge Per Credit Hour 2006–2007 Schedule

Course Level	Florida Students	Non-Florida Students
0001–4999	\$104.23	\$541.95
5000 and above	\$236.60	\$868.00
Thesis/Dissertation	\$236.60	\$868.00
Law Matriculation Pre-Fall 2005	\$265.26	\$932.34
Law Matriculation 2005-06	\$303.11	\$953.39
Law Matriculation 2006-07	\$321.89	\$988.97
Medical per year	\$17,608.38	\$52,159.57

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 (1) Florida resident graduate credit hour, unless also enrolled in other credit courses at Florida State University during the same academic term.

Special Fees, Fines, and Penalties

Note: All fees subject to change.

Application Fee: \$30.00. Applicants for admission as degree-seeking or non-degree-seeking are assessed a nonrefundable application fee.

Admission Deposit: \$200.00. Admitted freshman and law school students who plan to attend Florida State University must pay a nonrefundable fee that will be applied to their tuition.

New Student Orientation Fee: \$30.00. 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. A late payment fee is assessed against students who do not pay their tuition in full by the required due dates (see the "Academic Calendar" in this *General Bulletin*).

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

Replacement FSUCards: \$15.00. A fee for the preparation of a new card is assessed against those students, including high school students, who lose their FSUCards.

Duplication/Photocopying Fee: At cost. A fee is assessed for duplicating or photocopying documents.

Standard Tests Fee: At cost. A fee is assessed for test materials and related factoring or grading charges levied by an external agency used in standardized tests, such as the Graduate Record Examinations.

Transcript Fee: \$5.00. This fee is assessed for each official transcript issued.

Installment Contract Fee: \$10.00 per contract. This fee is assessed for executing an installment contract for tuition payment available during fall and spring semesters only and must be done in person.

Transportation Access Fee: \$6.35 per credit hour. **Rate subject to change.** This fee is assessed per credit hour to all main campus students. It covers all modes of transportation on campus such as sidewalks, bikes, mass transit (on- and off-campus buses), and vehicles. Revenue generated by this fee is used to improve the overall infrastructure of campus for all students. For additional information about parking locations, rules, regulations, and rates, go to <http://www.vpfa.fsu.edu/parking>.

Returned Check Charge, Stop Payment Charge: \$25.00 or five percent (5%) of the amount of the check, whichever is greater (rate subject to change). A returned check/stop payment charge is assessed against

the account of a student who has a check or electronic authorization for payment returned by the bank to Florida State University. Florida State University automatically submits all personal checks twice for payment if the check was returned once for insufficient or uncollected funds. This is an automated process, and the second submission cannot be stopped; however, there is no charge assessed by Florida State University for this second submission.

Returned check charges are assessed for all personal checks written and electronic payments authorized for tuition, fees, or any services provided by the University that are returned to Florida State University for insufficient funds, uncollected funds, wrong account numbers, closed accounts, and stop payments placed on checks. In addition to the returned check charge, if the initial payment is for tuition and redemption of the returned item is not made prior to the tuition payment deadline, a late payment fee is assessed to tuition. Florida State University places a hold on accepting any personal checks or electronic payment authorizations from anyone on the student's account 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 sent to the student through mail to the address on the check or to the last maintained address in Florida State University's records. A copy of the notification letter will be sent to the maker of the check at the address on the check if the student is not the person on whose account the funds are drawn. After notification that a check has been returned, redemption including the service charge must be made by seven (7) working days with cash, money order, or cashier's check. Florida State University forwards all returned checks to the State Attorney's office for redemption and prosecution after collection efforts are exhausted. After a returned check is forwarded to the State Attorney's office, redemption of the check will not prevent prosecution.

Thesis 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 that is used to offset the cost of scientific materials or items consumed in the course of the students' laboratory activities. These fees are assessed based on the course

Library Fees

(All fees subject to change)

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

Fines for Overdue Reserve Library Books: (per book, per 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 students, graduate teaching assistants and associates, and faculty who do not return library books by the recall due date specified in the notice.

Fines for Inter-Library Systems: At cost.

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 2006–2007 academic year. The tuition and fee estimate is based on two twelve (12) semester hour terms. Estimated basic costs for the current academic year can be found at <http://admissions.fsu.edu/costs/>.

	Graduate In-State	Graduate Out-of-State
Tuition/Fees	\$5,822	\$20,976
Housing	6,372	6,372
Food	3,900	3,900
Books and Supplies	1,000	1,000
SUBTOTAL	\$17,094	\$32,248
Health Insurance*	1,483	1,483
TOTAL	\$18,577	\$33,731

*Effective Fall 2007, Florida State University will implement a mandatory health insurance policy for new students admitted to the University. Costs of meeting this requirement will be included in financial aid considerations. Students who currently have health insurance may show proof of comparable coverage and may not be required to purchase the University policy.

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 must be submitted by the third day of the term. Financial aid deferments will be entered by the Office of Financial Aid for eligible student accounts. If tuition is not paid or arrangements have not been made by the posted deadlines, a late payment will be assessed. Any course added after the tuition payment deadline must be paid in full within five (5) days or a \$100.00 late payment fee will be assessed. The University does not send out a bill, because students may change their course schedule and therefore the amount owed through the fourth day of the semester. Tuition and fees should be paid by the fifth day of the semester, and the grace period ends on the deadline a few days later as posted at <http://www.sfs.fsu.edu>. Note that University housing and other University-related fees have separate and earlier deadlines. Students can, however, get the amount of their tuition and fees due on the Internet at <http://www.mymoney.fsu.edu> or when they register for classes through the Web. Other options include accessing the kiosks located on the first floor of *University Center Building A*, calling the Office of Student Financial Services at (850) 644-9452, or going to *A1500 University Center*, 8:30 a.m.–4:30 p.m. Monday–Friday.

Students may pay by check, cash, money order, cashier's check, or FSUCard when paying in person. Florida State University does not accept two-party checks or foreign checks for payment. Make checks payable to Florida State University and include the last four digits of the student's social security number or the last eight digits of the FSUCard number, local phone, and address on each check. We accept FSUCards, American

Express, Discover, MasterCard, Visa, and electronic checks through the Internet only. Payment methods are described below. Credit card payments can only be made through the Internet at <http://www.fees.fsu.edu> or at kiosks located around campus. There is a non-refundable convenience fee for the online payment option.

Installment Contracts are only available for payments made in person. 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. This option is not available on the Internet. Failure to pay the balance of tuition by the due date will result in a late payment fee and a financial hold on your account and may result in the cancellation of your course schedule. Students must appear in person to initiate the installment agreement. A \$10.00 fee (rate subject to change) 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.

Convenient Drop Box for Payments. The Office of Student Financial Services has kiosks for student use at the first floor of the *University Center Building A*, near our office at *A1500*. Students may verify the amount due for tuition and fees (at the kiosks or through the Internet at <http://www.fees.fsu.edu>), insert a check, money order or cashier's check in the provided envelope, and put the envelope in the drop box. Payments are processed the next business day. Payments received in the drop box by 4:00 p.m. on the tuition payment deadline will be considered on time. Payments inserted after 4:00 p.m. will be considered late and assessed a \$100.00 late payment fee. Please do not deposit cash. We will not process foreign checks or two-party checks. Make checks payable to Florida State University and write the last four digits of your social security number or last eight digits of your FSUCard number, your current address, and phone number on the check. Checks not completed properly will be considered late.

Mail-In Tuition and Fee Payments Must Be Received by the Deadline. When paying fees by mail, send a personal check, money order, or cashier's check for the full amount of fees due. Please do not send cash. We will not process foreign checks, checks not completed properly, or two-party checks. Make checks payable to Florida State University and write the last four digits of your social security number or the last eight digits of your FSUCard number, current address, and phone number on the check. Checks not properly completed will be considered late. Payments should be mailed to *Florida State University, Office of Student Financial Services, A1500 University Center, Tallahassee, FL 32306-2394*.

Agency Billing. Students are responsible for all tuition and fees upon registration. Forms are available at <http://www.sfs.fsu.edu>. Students who are requesting their tuition paid by an agency must submit the required documents as soon as possible, but no later than the third day of the semester, and preferably thirty (30) days in advance. Those students receiving financial aid should submit the documents by the third day of the semester; otherwise, tuition will be deducted from the student's financial aid, and refunds will not be made to the student until the agency or department makes its payment to the Office of Student Financial Services. Financial aid students must report this payment as an income source on their application, or upon further evaluation by the Office of Student Financial Aid, the student may be "over-awarded" and may be required to repay financial aid to the University. If the agency or department has not paid the tuition by the end of the current semester, a late payment fee of \$100.00 will be assessed to the student's account, and the student is required to pay it before being granted other University services. Accounts left unpaid at the end of the semester will be put in a delinquent status, and the student will not be able to receive University services (registration, transcripts, diplomas, etc.) Agencies that do not pay in a timely manner may cause the Office of Student Financial Services to put the student's account in a non-billing status for subsequent semesters; consequently, the student will be required to pay tuition by the regularly scheduled deadline, and the University will refund to the student the amount the agency pays (less University charges) after they have paid it. Students with agency payments that are

contingent upon grade(s) received are not eligible for agency billing, and tuition must be paid by the regularly scheduled deadline. The Office of Student Financial Services does not bill agencies for housing, books, meals, etc.

Department Billing. Department billings must be submitted to the Office of Student Financial Services by the appropriate college as early as possible and preferably by the third 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, 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. 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; online courses; Center for Professional Development (CPD) courses; College of Medicine courses; College of Law courses; all graduate program courses in the College of Business; and other one-to-one instruction courses. Accordingly, state employee tuition waivers may not be used for these courses.

Florida State University accepts only the official FSU State Employee Tuition Waiver Form. Agencies may require additional paperwork or forms that will not be accepted unless accompanied by the FSU State Employee Tuition Waiver Form.

State employees using a tuition waiver must complete the registration process and submit the tuition waiver to the Office of the University Registrar **on the fifth day of classes only**. State employee tuition waivers may not be used for any course that is registered for prior to this space-available registration window. Thus, for any class obtained prior to the fifth day of classes, the student assumes personal financial liability for tuition.

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

Panama City Campus

Students who intend to enroll at the Panama City campus of Florida State University 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 at the time of registration for classes. The student is responsible for dropping classes or withdrawing from school. For more information on policies regarding attendance and schedule cancellation, please refer to the section on "Cancellation of Student Schedules for Non-Payment of Tuition and Fees." Out-of-state tuition and matriculation fee waivers will not cover dropped or withdrawn classes.

Delinquent Fees

Students who have amounts owed to the University may not complete their registration, participate in graduation ceremonies, receive a diploma, receive an associate in arts certificate, or receive a transcript until all amounts owed to the University have been satisfactorily settled. This includes, but is not limited to, library charges, health center charges, parking fines, and University debt. All payments will be applied to current tuition first and then to the oldest outstanding debt. Non-refundable collection fees, as well as legal fees and interest assessment through court judgments, are added to a student's account if the student has had

an outstanding debt for 120 days or longer. When an account is sent to a collection agency, the customer must make payment arrangements directly with the agency. Payment arrangements do not permit student privileges such as registration, official transcripts, etc. Accounts must be paid in full to obtain further privileges.

Registration Stop for Outstanding Charges

A financial “stop” is placed on all academic progress for those students who have outstanding charges due to the University. Students owing any amount, including current semester tuition, are not permitted to register for classes. The “stop” will not be removed and such students will not be permitted to register or receive other University services until the debt is cleared.

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

In accordance with Board of Governors Rule 6C-7.002 (6), F.A.C., students who do not pay tuition and fees or make arrangements for tuition and fee payment by the published deadline each semester will have their schedules canceled. Students will be notified using their FSU e-mail account concerning outstanding tuition delinquencies and given an opportunity to pay tuition and fees or make arrangements for tuition and fee payment with the Office of Student Financial Services prior to cancellation. Students whose schedules are canceled for non-payment of tuition and fees will have their academic progress discontinued for the term in question and will not be able to attend class or receive grades.

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

Students whose schedules are canceled for non-payment of tuition and fees may appeal to the University Registrar for reinstatement and continuation of academic progress for the term. A written appeal must be submitted to the University Registrar by the end of the 12th week of the Fall and Spring semesters (consult the *Registration Guide* for Summer term deadlines). Prior to a student’s appeal being approved, the Office of Student Financial Services must verify that payment for the current term has been received or that appropriate arrangements have been made for tuition and fee payment. Students whose schedules are reinstated are subject to a \$100.00 late registration fee and a \$100.00 late payment fee. Check or credit card payments that are returned or refused will negate any tuition payment agreement for the reinstatement of a student’s schedule. The University reserves the right to deny reinstatement when a demonstrated pattern of tuition delinquencies over two or more semesters has occurred.

Tuition Waivers, Deferments, and Financial Arrangements

Out-of-State

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 University to waive portions of out-of-state tuition for a limited number of students in specific categories. Students in the following categories may apply:

- Out-of-state graduate students having at least a one-quarter time assistantship (teaching or research) or a fellowship equivalent in value to at least a one-quarter time assistantship
- Foreign student programs, or student exchange programs
- Students having special skills in music, dance, theatre, or athletics
- Graduate students with outstanding academic credentials and abilities

Special and part-time students at the undergraduate and graduate level are not eligible for out-of-state tuition waivers. Tuition waivers must be submitted by the appropriate college preferably by the fourth day of each semester but definitely no later than the fifth class day of the semester. **Tuition waivers do not cover the total amount of fees due and may have an effect on financial aid awards.** For information regarding out-

of-state waivers, graduate students should contact the Dean of Graduate Studies. Tuition and fees not covered by waivers must be paid in full by the deadline as posted at <http://www.sfs.fsu.edu>.

Waivers for Florida Residents Over 60 Years of Age

When registering to audit courses not for credit, all fees are waived for citizens 60 years of age and older who are Florida residents. All requirements pertaining to auditing courses must be met, and, in addition, proof of age and residency must be presented. For further information, refer to the “Office of the University Registrar” chapter of this *Graduate Bulletin*.

Note: Audited courses do not earn credit hours or appear on a student’s permanent record.

Policy Concerning Late Fees

A student may request a waiver of the late registration fee at the Office of the University Registrar. Documentation supporting University error or extraordinary circumstances will be required.

A student may request a waiver of the late payment fee at the Office of Student Financial Services if payment was not made by the established deadline because of a University error, administrative error, or extraordinary circumstances beyond the control of the student. Supporting documentation is required.

Note: Lack of funds, not applying for financial aid on time, or not being aware of the payment deadline is not a valid reason for waiving the late fee. Request to waive late fees must be made by completing a waiver request form online at <http://www.mymoney.fsu.edu>. If the request is denied, the student may appeal to the Late Payment Fee Appeals Committee by contacting the Office of Student Financial Services at (850) 644-9452. The committee meets once a month or as needed.

The **Late Payment Fee Appeals Committee**, which consists of representatives from the Office of the University Registrar, Office of Financial Aid, and the Office of Student Financial Services, provides an opportunity for students to appeal a denial of their request for a late payment waiver. The appeals committee’s decision is the final step in the University’s late payment appeal process. Forms are available through the Internet at <http://www.sfs.fsu.edu>.

Deferments and Financial Arrangements

Financial aid is disbursed during the second week of the semester. Students must pay, or make arrangements to pay, all fees due by the tuition payment deadline.

Financial aid deferments are authorized by the Office of Financial Aid. Departmental billings are authorized by the 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. Student Financial Services may refuse an agency billing for an agency that has demonstrated that it does not pay promptly. 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 deferment expiration date, the student will be assessed a \$100.00 late payment fee and may have their course schedule cancelled.

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

Application Fee

Individuals who make application to Florida State University shall pay a nonrefundable application fee of \$30.00. This fee may be waived for freshman applicants who can document that they have received a fee waiver because of economic need as determined by the College Board or the American College Testing Program.

Refund of Fees

Regulations Concerning Refund 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 fee and outstanding University charges) during the term will be carried forward and will be applied against subsequent University charges incurred or may be refunded by request.

Full refunds of tuition fees may be granted in instances of withdrawal from the University under the following conditions:

1. Involuntary call to active military duty
2. Death of the student or death in the immediate family (parent, spouse, child, sibling)
3. Illness of the student of such duration or severity, as confirmed in writing by a physician, that completion of the term is precluded
4. Cancellation of the course by the University
5. Exceptional circumstances that could not have been foreseen and were beyond the control of the student, as approved by the University refund committee

Students who drop a course without fee liability after their tuition and fees are paid may be eligible for a tuition refund. Any amount paid in excess of the amount owed to the University during the semester/term will be carried forward and may be applied against subsequent University charges incurred or will be refunded upon request; however, **any outstanding charges owed to the University will be deducted, and the balance will be issued as a refund.** At the beginning of a semester, refunds will not be processed until the end of the third week of class to ensure that all checks have cleared the bank. Refunds requested during the fiscal year close-out, during the last two weeks of June, will not be processed until the first week of July. The refund will be processed as a credit to the student's FSUCard account for currently enrolled students, unless the student requests a check to be mailed to the address on file. However, payments made by credit card will be refunded to the credit card. Checks will be mailed to those students who are no longer enrolled. Refund request forms are available at the Office of Student Financial Services, *A1500 University Center*, or online at <http://www.sfs.fsu.edu/forms.html>.

Students who withdraw after the fifth day of the semester/term, but prior to the end of the fourth week of the semester (or for Summer sessions by the first twenty-five percent [25%] of the term) are eligible for a twenty-five percent (25%) refund of tuition and fees. After this period, students who withdraw are held fully liable for fees. Students who withdraw and have received federal financial aid (Title IV programs) or state or University aid may be required to repay to the aid source the amount of unearned financial aid funds disbursed to them as of their withdrawal date as described in the section on 'Withdrawals and Return of Financial Aid.'

Note: In the case where a withdrawal petition is approved, a refund only can be provided **if the refund withdrawal request is submitted within six (6) months after the end of the semester/term in which the withdrawal occurred.** If financial aid is received by the student during the term in which the refund is granted, state and federal regulations may require that the refund be returned to the aid source.

An application for a request for refund of fees should be submitted as follows:

- **Tuition Fees.** *Office of Student Financial Services, A1500 University Center, <http://www.sfs.fsu.edu>*
- **Food Plan.** *Director of Food Services, 144 Oglesby Union*

- **Housing Fees.** *Director of Housing, 109 Student Life Building*
- **Parking Decals.** *Director of Parking, C2300 University Center*
- **Textbooks.** *Manager of Florida State University Bookstore, Parking Garage, Main Level*

Withdrawal and Return of Financial Aid

Effective Fall 2000, students who withdraw and have received financial aid will be required to repay to the program source the amount of **unearned** financial aid funds disbursed to them as of their withdrawal date. Programs include Pell Grants, Perkins Loans, Supplemental Educational Opportunity Grants (FSEOG), Stafford Loans (subsidized and unsubsidized), Parent Loans (the Federal PLUS program), and other awards. The **unearned** amount of program funds is calculated based on the percentage of the semester completed before the date of withdrawal. Both the University and students receiving financial aid are required to return **unearned** financial aid to the aid source. The University is required to return the **unearned** portion of the financial aid funds it received from withdrawing students that was used to pay institutional charges such as tuition, fees, housing, and other educationally-related expenses assessed by the institution. The funds returned to the aid source by the University will be credited against the student's total liability of **unearned** funds. However, students will owe the University the amount returned to the aid source for institutional charges. In addition, any student who receives Title IV funds and stops attending classes during the semester and does not officially withdraw from the University is considered an unofficial withdrawal according to Title IV federal regulations. The University is required to return unearned financial aid to the federal government for all unofficial withdrawals in the same manner as students who officially withdraw.

Students must repay the unearned Title IV funds to any Title IV loan program in accordance with the terms of the loan. For Title IV loan programs, **unearned** grant program funds are considered overpayments, and students are required to return 50 percent of the grant. Students who owe grant overpayments remain eligible for Title IV program funds for forty-five (45) days if during those forty-five (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 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

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 study 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. Help in completing the financial aid forms is available from professional financial aid counselors located in the *University Center, Building A, Room 4400*. Assistance is also available 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 8:30 a.m. to 5:00 p.m.

Once an application for admission has been submitted, students may monitor their financial aid status by visiting <http://www.finaid.fsu.edu>. This site will also provide information on any outstanding documents required to complete the financial aid file. Upon admission and completion of the financial aid file, a student's financial aid award may also be found on this site.

Panama City Campus

Students who intend to enroll at the Panama City campus and who 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, (850) 644-2090*.

Graduate Students

Graduate students may apply for federal loans and federal work-study by completing the Free Application for Federal Student Aid (FAFSA) at <http://www.fafsa.ed.gov>. Graduate fellowships and assistantships are awarded through the Office of Graduate Studies and the respective academic departments.

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 2008-2009 year begins January 1, 2008, and ends June 30, 2009. 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, 2008. Estimated student/parent tax data is needed for completion of the FAFSA document until current year taxes are filed. **The University requires a separate application for Summer financial aid, which may be obtained from the Office of Financial Aid or on our Web site at <http://www.finaid.fsu.edu>.**

Financial Aid Application Process

To apply for federal, state, and institutional aid at Florida State University, students must complete the Free Application for Federal Student Aid (FAFSA). Students are encouraged to apply directly over the Internet by accessing the following Web page: <http://www.fafsa.ed.gov>.

Internet applications can be completed from any home computer with secure Internet access, or through Internet capable computers in many libraries and schools. Students in the Tallahassee area may use computers at Florida State University to submit their application. Continuing students have access to various computer labs on campus. To apply, the following materials will be necessary to complete the data required:

1. The student's social security card and driver's license
2. W-2 forms or other records of income earned
3. 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.
4. Student's and student's spouse's (if married) Federal Income Tax Return (estimated figures are acceptable for application before filing of return)

5. Records of other untaxed income received, such as welfare benefits, social security benefits, TANF, veteran's benefits, or military or clergy allowances
6. Current bank statements and records of stocks, bonds, and other investments
7. Business or farm records, if applicable
8. 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 Florida State University, but while early application for aid is recommended (as soon as possible beginning January 1), a student can not be awarded aid until he/she is officially accepted for admission to 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 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.

Fees and Financial Aid Students

The University distributes aid in two ways for all registered financial aid students whose funds are available to the Office of Student Financial Services. Students must complete an Account Refund Setup Disbursement Authorization Form choosing one of the following two ways to receive financial aid:

1. By Electronic Funds Transfer (EFT) to your FSUCard Account at Sun Trust. The University recommends this method as the most efficient option. Approximately 80% of the student body receiving financial aid at FSU have chosen to process their aid electronically and take advantage of the latest technology in banking services.
2. By a check mailed to your local address. It is the student's responsibility to keep his or her address record current with Florida State University. Checks are not forwarded by the post office.
3. Exceptions:
 - a. Students who have a hold on their funds must clear it by the posted deadline. Loans must be returned to the lender within twenty (20) days of receipt. The University will make every effort to contact students by phone and e-mail. Students whose aid has not been processed by the end of the second week of the term should contact the Office of Student Financial Services at sfs@admin.fsu.edu or in person at *A1500 University Center*. In order to receive aid, a student must be enrolled for the required number of hours.
 - b. Students whose financial aid has not arrived by the beginning of the semester should receive a tuition deferment if application was made by August 1 of each year. After the initial distribution dates at the beginning of the semester, additional funds that become available will be disbursed daily and mailed or sent to the FSUCard account in accordance with the selection made on the student's Account Refund Setup form.

The minimum number of hours required to be eligible for financial aid is six (6) semester hours.

All financial aid students must check their financial aid status at <https://campus.fsu.edu> on the scheduled date. If their online billing statement says they have a deferment or their tuition has been paid, they do

not need to come to the Office of Student Financial Services. Students should check the status of their financial aid award on the published dates.

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

If you have any questions, please contact the Office of Student Financial Services at (850) 644-9452, by e-mail at sfs@admin.fsu.edu, 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 this *General Bulletin*). After this date, a \$100.00 late payment fee is assessed, and grades will be held at the end of the semester until fees are paid in full.

Note: Financial aid students who are having their tuition paid by an agency or department billing should submit the required documents no later than the fifth day of the semester, but preferably immediately after registration. Intern Participation Certificates and the Florida Prepaid College Program do not pay the full amount of tuition. Students must pay the remaining balance due by the tuition payment deadline. All state employee waivers must be turned into the Registrar’s office at the University Center on the fifth day of classes only. Outstanding tuition and charges from a previous semester will be deducted from financial aid received during a current semester, if registration is permitted.

Deferments, Loans, and Check Cancellation

Deferments

Students must confirm their application is complete by the first week of the semester by going to <http://www.mymoney.fsu.edu>.

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

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

AND

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

Financial aid students who do not receive a financial aid deferment must pay their tuition in full by the tuition payment deadline. See the dates published in the “Academic Calendar” included in this *Graduate Bulletin*. Failure to pay by the published deadline will result in a late payment fee assessment.

Note: Financial aid deferments expire before the end of the semester. See the *Registration Guide* for the expiration date. Students must confirm their financial aid has arrived and all requirements have been met by the deferment expiration date. Go to <http://www.mymoney.fsu.edu> and log in; you will then see your courses and fees detailed. With your temporary deferment, your total balance may show “\$zero” (\$0.00) for the Current Term Tuition. When your financial aid arrives, the screen will show how much has been paid toward your tuition. You must ensure your financial aid pays your tuition by the deferment deadline. If you have questions, contact us at sfs@admin.fsu.edu or (850) 644-9452. Also, check your financial aid status at <http://www.studentsfirst.fsu.edu>. If the student’s aid is not available by the expiration date, it is the student’s responsibility to pay tuition in full. Failure to pay by the expiration date will result in a late payment fee assessment of \$100.00, and your schedule for the next semester may be cancelled. Additionally, registration will not be permitted and transcripts and diplomas will not be mailed until debts are paid in full.

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, A4400 University Center. Eligibility for the loan will be determined by the type of aid awarded and the hours enrolled. Accounts in delinquent status (past due) are not eligible for loans. 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, whichever comes first. 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 death in the family or unexpected major medical or dental bills may apply for an emergency loan at the Office of Financial Aid. Documentation and a picture ID are required to receive an emergency loan. Accounts in delinquent status are not eligible for loans. Loans must be paid by the due date, and University services will not be granted until paid in full.

Check Cancellation

Any Stafford Loan check available at financial aid distribution that is not disbursed by the check cancellation deadline will be returned to the lender for cancellation.

Loan Cancellation and Refusals

Students should notify the Office of Financial Aid to decline or refuse an awarded loan (Perkins, GSL, UGSL) prior to it being disbursed to the student. Financial aid is processed at the end of the first week of each semester and as it arrives thereafter. If the loan has already been disbursed, the student is required to notify Student Financial Services in writing within fourteen (14) days that they do not want part or all of the loan they have received. A form can be completed at the Office of Student Financial Services, and repayment can be made to Florida State University by FSUCard, cash, cashier’s check, or money order, or the original check can be brought to the Office of Student Financial Services, A1500 University Center. Students who want to refuse loans after the fourteen (14) day notification period must contact their lender for repayment.

Loan Exit Interviews

Federal and University regulations require that all recipients of federal loans participate in an exit interview counseling session upon graduation, withdrawal from the University, or dropping below six (6) semester hours. These loans include Perkins (NDSL), Subsidized Stafford (GSL), and Unsubsidized Stafford (UGSL) loans. Failure to complete this procedure will result in the withholding of diploma, transcripts, and other University services. To complete this requirement, students should go to the Secure Apps page on Blackboard (www.campus.fsu.edu) and select the “exit interview for financial aid” option. Students will need their user name and password to sign onto the session. Students planning to continue their academic studies at Florida State University should contact the Office of Student Financial Services at A1500 University Center to ensure that their exit interview stop is removed.

Additional Sources of Financial Aid

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

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 for the purpose of recruiting first-time graduate students at 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 waivers. Application forms may be obtained from the chair of the student's proposed major department or the Web site of the Office of Graduate Studies at <http://www.fsu.edu/gradstudies>. 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 for 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*.

The Federal Work Study Program (FWSP)

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 a need-based program, and is awarded on a first-come, first-served basis.

Students may also utilize their Federal Work Study awards by participating in community service through the **Community Service 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 and encourages student awareness and continued participation in society at large. Students may assist with programs related to health care, child care, literacy training, education (including tutoring), welfare, and social services. Some students may serve as mentors for educational and recreational activities, or work as counselors in areas such as career counseling.

To determine eligibility for the 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 two apartment complexes. **Rogers Hall** is an eight-story co-ed residence for single students, and can accommodate 188 residents. The building is equipped with central heating and air-conditioning, and each room is furnished. It is located on the west side of the main campus, well within walking distance to all university buildings. Two students are assigned to each one-bedroom apartment; no single-occupancy is available. **Sherrill W. Ragans Hall** houses a total of 555 men and women in three- and four-bedroom apartments. Most residents are undergraduates, but a limited number of rooms are reserved for single graduate students. Each apartment has 2 baths, a common study area, living area, and kitchen.

For the security of the residents, entrances to residence hall apartments are locked at all times. Residents must use keys to enter, and visitors must use the telephones at the main entrances to request admittance.

Alumni Village

Graduate students, either single or with dependents, are also eligible for housing in Alumni Village, an apartment complex one and a half miles from campus. Alumni Village offers 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 ethernet access): \$380.00*

Alumni Village

One-bedroom furnished apartment:	\$355.00–\$383.00*
Two-bedroom furnished apartment:	\$380.00–\$531.00*
Three-bedroom furnished apartment:	\$550.00–\$606.00*

Monthly rate **does not** include utilities except garbage collection.

*All housing rental fees are established by Florida State University and are subject to approval by the State Board of Education. University Housing is a self-supporting auxiliary and rental rates must reflect operating costs. Fees quoted are 2006–2007 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 online application is available at <http://www.housing.fsu.edu>.

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

Agreements

The terms and conditions of occupancy for University apartments in Rogers Hall and Alumni Village require residents to file a thirty-day notice of intent to vacate. Rent is charged for thirty (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 terms and conditions of occupancy for Sherrill W. Rogers Hall are for one semester only. Students who wish to extend their contract beyond their initial semester must contact University Housing one month prior to the end of their initial contract period.

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*.

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

The Office of Graduate Studies hosts a New Graduate Student Orientation at the beginning of each fall and spring semester. The goals of Orientation are to provide students with an understanding of what to expect academically and financially as graduate students; describe the professional ethics associated with graduate research and creative endeavors; highlight award-winning faculty and graduate students; and showcase campus services and extracurricular opportunities for graduate students. Graduate students attending this campus-wide Orientation can interact with representatives of graduate student organizations and campus offices, and enjoy refreshments provided by the Congress of Graduate Students. In addition to the information and networking opportunities afforded by the fall and spring Orientation events, professional development workshops are offered collaboratively by the FSU Office of Graduate Studies, the University Libraries and the Career Center throughout the academic year.

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

Departments often offer their own formal or informal orientation sessions; queries regarding these meetings should be made directly to the chair of the student's department. 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 must report to the International Center and present their immigration documents. In addition, incoming students must attend an orientation session before they will be allowed to register for classes. The International Center orientation provides information and materials about immigration, insurance and health issues, community resources, and support services available to international students and their families. Notice of the dates for the required orientation session, held prior to the Fall, Spring, and Summer semesters, is included in the pre-arrival packet that is sent to admitted students along with the appropriate immigration form (I-20 or DS-2019). Note that the mandatory International Center orientation is not the same orientation session offered by the student's academic graduate department or by the Office of Graduate Studies. For more information, visit ic.fsu.edu.

Professional Development

Professional development, improving and increasing one's skill sets, is important at every stage of graduate education and beyond. For example, improving one's oral and written communication skills and developing an understanding of research and creative ethical behavior are types of professional development. At FSU, numerous professional development opportunities are offered by academic departments/programs, the Center for Learning and Teaching, the Career Center, and the Office of Graduate Studies. One professional development program administered by the Office of Graduate Studies is Preparing Future Faculty (PFF) which provides a range of faculty experiences for graduate students, (e.g., campus visits to a community college, a four-year college and with faculty at FSU).

Another approach to professional development is the series of workshops offered during the academic year for FSU graduate and postdoctoral students. Working closely with outstanding research faculty, administrators and the Career Center, the FSU Office of Graduate Studies offers a wide range of workshops designed to equip students to achieve their educational and career goals. Descriptions of the academic year professional development workshops are located at <http://gradstudies.fsu.edu/workshops.html>.

Preparing Future Faculty (PFF) Program

The **Preparing Future Faculty (PFF)** program assists doctoral students in getting ready for faculty work. Through participation in course work, workshops, mentoring, and partner institution site visits, PFF Fellows increase awareness of expectations for faculty performance and of resources available to aid in scholarly careers, and build their readiness to address teaching, research, and related demands of faculty life.

PFF program activities are organized around the keystones of: Knowledge about Higher Education, Teaching Preparation, Research Preparation, Technology for Scholarship, Mentoring, Miscellaneous Professional Development, and Portfolio. Events are either discipline-specific or campus wide. All FSU doctoral students are eligible to participate, as are FSU post-doctoral fellows and adjunct/visiting faculty. Fellows who meet specified requirements, often involving participation over a two-year period, are awarded a completion certificate, but PFF events are open to doctoral students/post-docs/visiting faculty regardless of whether they intend to earn a completion certificate.

FSU's PFF program coordinates with the national Preparing Future Faculty initiative of the Council of Graduate Schools and the Association of American Colleges and Universities, involving 45 doctoral degree-granting institutions and more than 300 partner institutions.

To learn more about FSU's PFF program, check with your academic department, visit <http://gradstudies.fsu.edu/pff.html>, or call the Office of Graduate Studies at (850) 644-3500.

Graduate Teaching Assistant Support

Center for Teaching and Learning

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

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. *C3500 University Center*; 8:00–5:00, Monday through Friday, (850) 644-8004.

University-Wide Teaching Conferences

Each year, during the week preceding the Fall semester, a two-day conference is 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, including university policies at Florida State University. Experienced instructors who feel the need for a refresher course are invited to participate in any part of the conference they feel might be useful.

Workshop Series

Workshops and panel discussions that deal with issues specifically relevant to instructors who teach in University classrooms are held throughout the fall and spring semesters. Some of the many topics include lecturing, strategies for active learning, and leading an effective discussion, along with many others. Visit <http://apps.fsu.edu/ctl> for a comprehensive listing of workshops offered, and to register online for the workshops.

Individual Consultation

A consultant from the Center for Teaching and Learning is 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 observation 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://apps.fsu.edu/ctl>.

Resources

Many teaching resources are available from the program. Handouts on lecturing, testing, and a guide to better grading and what undergraduates expect of Instructors are available without charge. Our lending library, located in UCC 3529, is available for browsing.

Web Resources

Center for Teaching and Learning Web site. One of the many resources available to instructors at Florida State University, the site includes descriptions and schedules of the various programs offered at the University. Please visit <http://apps.fsu.edu/ctl>.

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. For more information, contact the *Office of Graduate Studies*, (850) 644-3500.

Campus.fsu.edu. 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 receive cash awards and are acknowledged at an awards presentation and reception each 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). Applications are accepted in the spring for the following academic year. Appointments are made each year at the beginning of the Fall semester.



OFFICE OF THE UNIVERSITY REGISTRAR

Registrar: Tim Martin; **Interim Registrar:** Kimberly Barber; **Associate Registrar:** 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 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*, 108 Student Services Building, (850) 644-9566, or visit <http://disabilitycenter.fsu.edu>.

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 Florida State University is conducted by Web site. Using the Internet Web site, 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 home. **Please note that by registering students accept both fee and grade liability.** Students are advised if the requested course is available and informed of other matters related to registration, such as variable credit. However, the registration system will not tell students if they have registered for classes meeting during the same time period. Therefore, it is important to plan very carefully before requesting courses.

Registration Guide and Course Schedules

Florida State University publishes the *Registration Guide*. The *Guide* contains a list of all registration deadlines, fee and payment information, and important announcements. This information is published online at the Office of the University Registrar Web site at <http://registrar.fsu.edu>.

Lists of course offerings, 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 attempting to register online. Students must contact the appropriate departmental office for any clearances or authorization needed. Individual instructors should be contacted for courses requiring "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 four 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

Course credit may be modified downward with the approval of the chair of the department that is offering the course and the appropriate academic dean. No course may be modified upward. Any student wishing to modify credit may obtain the necessary forms from the Office of the University Registrar.

Stops to Registration

Registration is prevented if all academic and/or administrative requirements have not been fulfilled prior to the term. A "stop" may be placed on the student record if one or all of the following deficiencies exist: academic dismissal, incomplete admissions documents, fiscal deficiency, or failure to process readmission papers after a withdrawal or after a two-term absence (including the summer term) from the University. Failure to meet specific requirements of a University college or department, the judicial office, or the office of special students may induce a registration "stop".

A "stop" is placed on all students who have outstanding charges due to the University. Students owing any fees are not permitted to register for classes. The "stop" will not be removed and such students will not be permitted to register until the debt is cleared.

Students notified of a "stop" should contact the notifying office immediately and arrange for removal to be allowed to register for classes, receive official transcripts, and/or receive a diploma.

If students with a "stop" on their record are allowed to register in error, they 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.

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.

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

In accordance with Board of Governors Rule 6C-7.002 (6), F.A.C., students who do not pay tuition and fees or make arrangements for tuition and fee payment by the published deadline each semester will have their schedules canceled. Students will be notified using their FSU e-mail account concerning outstanding tuition delinquencies and given an opportunity to pay tuition and fees or make arrangements for tuition

and fee payment with the Office of Student Financial Services prior to cancellation. Students whose schedules are canceled for non-payment of tuition and fees will have their academic progress discontinued for the term in question and will not be able to attend class or receive grades.

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

Students whose schedules are canceled for non-payment of tuition and fees may appeal to the University Registrar for reinstatement and continuation of academic progress for the term. A written appeal must be submitted to the University Registrar by the end of the 12th week of the Fall and Spring semesters (consult the *Registration Guide* for Summer term deadlines). Prior to a student's appeal being approved, the Office of Student Financial Services must verify that payment for the current term has been received or that appropriate arrangements have been made for tuition and fee payment. Students whose schedules are reinstated are subject to a \$100.00 late registration fee and a \$100.00 late payment fee. Check or credit card payments that are returned or refused will negate any tuition payment agreement for the reinstatement of a student's schedule. The University reserves the right to deny reinstatement when a demonstrated pattern of tuition delinquencies over two or more semesters has occurred.

Student Cancellation of Schedule

A student may cancel registration during the first 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 seventh week of classes with the exception of courses involved in allegations of academic dishonesty; 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. Adding courses after the first four days of classes requires the academic dean's approval.

After the seventh 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 course work 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] 644-6140*) 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—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

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.

Registration of Special (Non-Degree Seeking) Students

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

Transcripts

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

Transcript service may be denied if a financial or judicial stop has been placed on a student's record. Clearance from the Controller's Office or the judicial office must be obtained prior to 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.

Unofficial transcripts are available to students free of charge. Visit <http://campus.fsu.edu>, click the "Secure Apps" tab, and select "My Unofficial Transcript."

Enrollment Certification

All student certifications will be by official request only. Students in need of enrollment verification may request one online at <http://campus.fsu.edu> or by submitting a request in writing to: *Certification Section of the Office of the University Registrar, A3900 University Center, Tallahassee, FL 32306-2480*. On the Web site, 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**, have 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 intending to do this must be accepted by both departments. A Dual Enrollment Request Form showing endorsement by both department heads and dean(s), as appropriate, must be sent to the Dean of 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 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.

Distinction between Dual and Joint Degrees

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

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

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

Dual Degrees are two degrees earned simultaneously when a student is accepted by both a department/programs and is approved by appropriate deans and the Dean of Graduate Studies. A student must be admitted to one academic program initially, and after the first semester, may apply and be accepted to the second-degree program. There is not formal relationship between the two-degree program requirements in a dual degree situation.

Master’s Degree Programs

Degrees Offered

The University confers at the master’s level the master of arts, 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

At the master’s level students are expected to demonstrate an understanding and make sense of the core knowledge needed to function in their professional field. Master’s level students are expected to demonstrate an understanding of the research process, and/or creative or problem-solving activity or application of the knowledge appropriate to their discipline. The student is held responsible for meeting the requirements listed below.

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 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: 1) be recommended by the major department; 2) be evaluated as graduate work by the evaluation section of the Office of Admissions of Florida State University; and 3) have been completed with grades of 3.0 ("B") or better.

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

The University does not accept experiential learning, or award credit for experiential learning. Transfer credit based on experiential learning from another institution will not be accepted.

General Course Requirements

The distribution of hours among 4000, 5000, and 6000 level courses and above is determined by the college 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. Upon receipt of the appropriate approvals, a copy of the completed Prospectus Approval Form must be

submitted to the Dean of Graduate Studies. If a department does not require a prospectus, the Prospectus Approval Form will serve as the substitute, signifying approval of the student's research plan and appropriate Institutional Review Board (IRB) endorsement.

Thesis

The subject of the thesis must be within the major field and must reveal independent investigation and knowledge of the methods of scholarship. It is the responsibility of the major professor to supervise the preparation of the prospectus and the thesis. The manuscript must be prepared according to the style and form prescribed by the department. These must conform to the University requirements regarding format. Formatting and clearance guidelines for the final electronic submission copy may be accessed at the Office of Graduate Studies Web site, <http://www.gradstudies.fsu.edu>, or by contacting the manuscript clearance adviser.

A student who has completed the required course work and continues to use campus facilities and/or receives faculty supervision, but **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. Underloads must be approved by the academic dean. Before registering for thesis hours, the student must consult the major professor as to the proportion of time to be devoted to thesis work. The number of hours listed will show the proportion of time to be devoted to thesis (with twelve [12] semester hours as an indication of full-time status). For example, OCE 5971, four (4) semester hours, will indicate that the student expects to devote one-third of the time to thesis. The number of hours should not only reflect the effort of the student, but should take into account the use of campus facilities/resources and faculty interaction/supervision.

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 or may be the same as the supervisory committee, the student should submit the final manuscript electronically to the manuscript clearance adviser. 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, College of Criminology and Criminal Justice, College of Education, FAMU—FSU College of Engineering, College of Human Sciences, College of Information, College of Music, College of Social Sciences, College of Social Work, College of Visual Arts, Theatre, and Dance, as well as in several interdepartmental and interdivisional areas. See relevant sections of this *Graduate Bulletin*.

Requirements of the Doctor of Philosophy 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: 1) have mastered definite fields of knowledge so that they are familiar not only with what has been done in their specific fields but also with the potential and opportunity for further advances; 2) have demonstrated capacity to do original and independent scholarly investigation or creative work in their selected fields; and 3) have the ability to integrate their selected fields of specialization with the larger domains of knowledge and understanding.

Admission

Admission in the formal sense is governed by the same minimum standards as stated in the “Admissions” chapter of this *Graduate Bulletin*. However, a special effort is made by the departments to select and to admit only those who appear clearly qualified for studies at this advanced graduate level.

Diagnostic Examination

The student who has been admitted to work toward the doctoral degree may, before the end of the second semester of post-baccalaureate study, be required to take a departmentally administered diagnostic examination. It will be designed to appraise the student’s ability to pursue the 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 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 College of Visual Arts, Theatre, 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.

Transfer Credit

The University does not accept experiential learning, or award credit for experiential learning. Transfer credit based on experiential learning from another institution will not be accepted.

Course Requirements

Because the 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. However, for all interdisciplinary programs, 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 **and degree program**. Additional members may be appointed if deemed desirable. All additional 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. Non-graduate 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, 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 following the reexamination must indicate the student either passed or failed. The results of the examination will be reported to the Office of the University Registrar for inclusion in the student's permanent record.

Time Limit for Completion of Degree Requirements

All requirements for the doctoral degree must be completed within five calendar years from the time the student passes the preliminary examination, or the student's supervisory committee will require that a new preliminary examination be passed.

Admission to Candidacy

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

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. Upon receipt of the appropriate approvals, a copy of the completed Prospectus/Topic Approval Form must be submitted to the Dean of Graduate Studies. If a department does not require a prospectus, the Prospectus/Topic Approval Form will serve as the substitute, signifying approval of the student's research plan and appropriate Institutional Review Board (IRB) endorsement.

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 Web site, <http://www.gradstudies.fsu.edu>, or by contacting the manuscript clearance adviser.

A student who has completed the required course work, passed the Preliminary Examination and submitted an Admission to Candidacy form to the Office of the Registrar, and continues to use campus facilities and/or receives faculty supervision, but **has not made a final dissertation submission** shall include in the required full-time load of twelve (12) semester hours a minimum of two (2) dissertation hours per term. Those with underload permission must register for at least two (2) hours of dissertation credit per term. Underloads must be approved by the academic dean. Before registering for dissertation hours, the student must consult the major professor as to the proportion of time to be devoted to dissertation work. The number of hours listed will show the proportion of time to be devoted to the dissertation (with twelve [12] semester hours as an indication of full-time status). For example, OCE 6980, four (4) semester hours, will indicate that the student expects to devote one-third of the time to dissertation. The number of hours should not only reflect the effort of the student, but should take into account the use of campus facilities/resources and faculty interaction/supervision.

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. Final approval of the dissertation by the entire supervisory committee is prerequisite to the awarding of the degree. This is true no matter how many hours a student has completed in dissertation or what grades have been recorded for the dissertation hours.

As a condition of undertaking a dissertation program, the student agrees that the completed dissertation will be archived in the University Libraries system. The student will make the electronic thesis available for review by other scholars and the general public by selecting an access condition provided by the Office of Graduate Studies.

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 adviser. 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 adviser 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 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.

An ETD must be made available in its complete and original format. It cannot be subdivided into chapters and disseminated under different distribution options.

Worldwide Distribution. Recommended to all of our students. This option makes the ETD freely available worldwide via the FSU ETD Digital Library. It should be noted that some publishers may see a conflict with this level of distribution prior to publication.

Embargoed Access (24 Months). Recommended to students who have a patent application in process or who want to restrict access to the ETD for a limited amount of time in order to pursue commercial interests or other publication. After the restricted time period, the document will be made freely available through worldwide distribution (option above).

The maximum delay in the release of a thesis, treatise, or dissertation to the university libraries and UMI/PQIL shall not exceed twenty-four (24) months from the date the thesis, treatise, or dissertation is approved by the FSU Office of Graduate Studies. In special circumstances, the Dean of Graduate Studies may grant an additional delay of twenty-four (24) months upon request if the case is made that the delay is in the best interests of all parties or if publication or commercial interest in the document is still ongoing. Such a request must be submitted at least one month prior to the expiration of the original period of delay.

A request for such a delay must be presented in writing 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.

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.

Note: Students should not suffer delays in their normal academic progress, including the final defense of the thesis or dissertation, as a result of a desire to delay release of the thesis or dissertation to the library.

Requirements of the Doctor of Education Degree

The doctor of education degree is offered by the College of Education, the College of Music, and the College of Visual Arts, Theatre, and Dance.

Potential candidates for this professional degree are selected on the basis of experience, skills, and goals of the students seeking admission to the programs in which the degree is offered.

Such students will ordinarily have had some years of teaching or academic administrative experience and have shown some promise of being able to develop their pedagogical or administrative skills through further research and training. The College of Education permits, as part of its experience requirement, the completion of a practicum, undertaken during the period of doctoral studies, in which the student engages in doctoral work-related activities within an external agency. Once the degree has been earned, its possessor should be able to perform the tasks of the profession with a high degree of efficiency.

The 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 "College 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 Judgment

Master's Degree

Successful completion of course work constituting the student's program of studies, comprehensive exam or thesis does not guarantee award of the master's degree. Faculty judgment of the academic performance of the student is inherent in the educational process in determining whether the award of the master's degree or admission into a higher level degree program is warranted.

Doctoral Degree

Successful completion of course work constituting the student's program of studies, comprehensive exam, preliminary exams, defense of prospectus, and defense of dissertation does not guarantee award of the doctoral degree. Faculty judgment of the academic performance of the student is inherent in the educational process in determining whether admission to doctoral candidacy and the award of the doctoral degree is warranted.

Registration for Final Term

For doctoral students and master's students in a thesis-type program, registration shall be required in the final term in which a degree requiring a thesis, dissertation, or treatise is granted, in accordance with the policies stated in the 'Thesis' and 'Dissertation' sections of this chapter.

If a student does not make the **manuscript final submission deadline** for a given term, but completes all degree requirements before the first day of the next term, it is possible to waive the registration requirement. To be eligible for this registration exemption, all degree requirements, including manuscript clearance, must be completed **prior to** the first day of the next term. The Office of Graduate Studies [(850) 644-3500] can provide information on this procedure. International students should contact the International Center for information on registration requirements related to immigration/visa status.

If a non-thesis student needs only to complete the comprehensive examination in a term **and did not register for the examination in the previous term**, registration must be requested from the Office of the University Registrar stating the department and the name of the examination. The student must pay the "examination only" fee.

If the student has not been enrolled for the previous two terms, readmission is required before registration.

Clearance for Degrees

Guidelines and Requirements for Electronic Thesis, Treatise, and Dissertation Writers may be accessed from the Office of Graduate Studies Web site, <http://www.gradstudies.fsu.edu> or by contacting the manuscript clearance adviser.

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

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 adviser 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 adviser 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 one copy 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 Web site, <http://www.gradstudies.fsu.edu>, or contact the manuscript clearance adviser. Consult the *Registration Guide* for the deadline dates.

Additional requirements may be imposed by individual programs or departments.



ACADEMIC REGULATIONS AND PROCEDURES

Academic Honor Policy

The statement on Values and Moral Standards at Florida State University says: “The moral norm which guides conduct and informs policy at Florida State University is responsible freedom. Freedom is an important experience which the University, one of the freest of institutions, provides for all of its citizens – faculty, students, administrators, and staff. Freedom is responsibly exercised when it is directed by ethical standards.” (Values and moral standards at Florida State University retrieved from the current *General Bulletin* located at <http://registrar.fsu.edu/>.)

The statement also addresses academic integrity: “The University aspires to excellence in its core activities of teaching, research, creative expression, and public service and is committed to the integrity of the academic process. The [Academic Honor Policy] is a specific manifestation of this commitment. Truthfulness in one’s claims and representations and honesty in one’s activities are essential in life and vocation, and the realization of truthfulness and honesty is an intrinsic part of the educational process.” (Values and moral standards at Florida State University retrieved from the current *General Bulletin* located at <http://registrar.fsu.edu/>.)

Guided by these principles, this Academic Honor Policy outlines the University’s expectations for students’ academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty throughout the process.

Note: Information regarding the Academic Honor Policy may also be accessed online at <http://dof.fsu.edu/honorpolicy.htm>.

FSU Academic Honor Pledge

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

Academic Honor Violations

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

1. **Plagiarism.** Intentionally presenting the work of another as one’s own (i.e., without proper acknowledgement of the source). Typical examples include: Using another’s work from print, Web, or other sources without acknowledging the source; quoting from a source without citation; using facts, figures, graphs, charts or information without acknowledgement of the source.
2. **Cheating.** Improper application of any information or material that is used in evaluating academic work. Typical examples include: Copying from another student’s paper or receiving unauthorized assistance during a quiz, test or examination; using books, notes, or other devices (e.g., calculators, cell phones, or computers) when these are not authorized; procuring without authorization a copy of or information about an examination before the scheduled exercise; unauthorized collaboration on exams.
3. **Unauthorized Group Work.** Unauthorized collaborating with others. Typical examples include: Working with another person or persons on any activity that is intended to be individual work, where such collaboration has not been specifically authorized by the instructor.
4. **Fabrication, Falsification, and Misrepresentation.** Intentional and unauthorized altering or inventing of any information or citation that is used in assessing academic work. Typical examples include: Inventing or counterfeiting data or information; falsely citing the source of information; altering the record of or reporting false information about practicum or clinical experiences; altering grade reports or other academic records; submitting a false excuse for absence or tardiness in a scheduled academic exercise; lying to an instructor to increase a grade.

5. **Multiple Submission.** Submitting the same academic work (including oral presentations) for credit more than once without instructor permission. It is each instructor’s responsibility to make expectations regarding incorporation of existing academic work into new assignments clear to the student in writing by the time assignments are given. Typical examples include: Submitting the same paper for credit in two courses without instructor permission; making minor revisions in a credited paper or report (including oral presentations) and submitting it again as if it were new work.
6. **Abuse of Academic Materials.** Intentionally damaging, destroying, stealing, or making inaccessible library or other academic resource material. Typical examples include: Stealing or destroying library or reference materials needed for common academic purposes; hiding resource materials so others may not use them; destroying computer programs or files needed in academic work; stealing, altering, or intentionally damaging another student’s notes or laboratory experiments. (This refers only to abuse as related to an academic issue.)
7. **Complicity in Academic Dishonesty.** Intentionally helping another to commit an act of academic dishonesty. Typical examples include: Knowingly allowing another to copy from one’s paper during an examination or test; distributing test questions or substantive information about the material to be tested before a scheduled exercise; deliberately furnishing false information.
8. Attempting to commit any offense as outlined above.

Student Rights

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

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

Students are also accorded the following prerogatives:

1. When possible, to discuss the allegations with the instructor
2. Privacy, confidentiality, and personal security
3. To be assisted by an adviser who may accompany the student throughout the process but may not speak on the student’s behalf
4. To choose not to answer any question that might be incriminating
5. To contest the sanctions of a first-level agreement and to appeal both the decision and sanctions of an Academic Honor Hearing

The student has the right to continue in the course in question during the entire process. Once a student has received notice that he/she is being charged with an alleged violation of the Academic Honor Policy, the student is not permitted to withdraw or drop the course unless the final outcome of the process dictates that no academic penalty will be imposed. Should no final determination be made before the end of the term, the grade of “Incomplete” will be assigned until a decision is made.

Students should contact the Dean of Students Department for further information regarding their rights.

Procedures for Resolving Cases

Step 1. Throughout the Step 1 process, the instructor has the responsibility to address academic honor allegations in a timely manner, and the student has the responsibility to respond to those allegations in a timely manner. For assistance with the Academic Honor Policy, students should consult the Dean of Students Department and instructors should consult the Office of the Dean of the Faculties.

If a student observes a violation of the Academic Honor Policy, he or she should report the incident to the instructor of the

course. When an instructor believes that a student has violated the Academic Honor Policy in one of the instructor's classes, the instructor must first contact the Office of the Dean of the Faculties to report the alleged violation to determine whether to proceed with a Step 1 agreement. The instructor must also inform the department chair or dean. (Teaching assistants must seek guidance from their supervising faculty member.) However, faculty members or others who do not have administrative authority for enforcing the Academic Integrity Policy should not be informed of the allegation, unless they have established a legitimate need to know. If pursuing a Step 1 agreement is determined to be possible, the instructor shall discuss the evidence of academic dishonesty with the student and explore the possibility of a Step 1 agreement. Four possible outcomes of this discussion may occur:

1. If the charge appears unsubstantiated, the instructor will drop the charge, and all documents created in investigating the allegation will be destroyed. The instructor should make this decision using the "preponderance of the evidence" standard and should inform the Office of the Dean of the Faculties.
2. The student may accept responsibility for the violation and accept the academic sanction proposed by the instructor. In this case, any agreement involving an academic penalty must be put in writing and signed by both parties on the "Academic Honor Policy Step 1 Agreement" form, which must then be sent to the Dean of Students Department. This agreement becomes a confidential student record of academic dishonesty and will be removed from the student's file five years from the date of the final decision in the case.
3. The student may accept the responsibility for the violation, but contest the proposed academic sanction. In this circumstance, the student must submit the "Academic Honor Policy Referral to Contest Sanction" form along with supporting documentation to the Office of the Dean of the Faculties. The Dean of the Faculties (or designee) will review the submitted documentation to determine whether the instructor has imposed a sanction that is disproportionate to the offense. The Dean of the Faculties may affirm or modify the sanction as appropriate. The decision that results from this review is final.
4. The student may deny responsibility. In this circumstance, the instructor submits the "Academic Honor Policy Hearing Referral" form along with supporting documentation to the Dean of the Faculties Office for an Academic Honor Policy Hearing. The student is issued a letter detailing the charges within ten class days of the receipt of the referral, and the schedule for the hearing will be set as soon as possible and within 90 days from the date of the letter. These timelines may be modified in unusual circumstances. Unless all parties agree, the hearing will not be held any sooner than 7 class days from the student's receipt of the charge letter. The process then proceeds to Step 2.

If the student is found to have a prior record of academic dishonesty or the serious nature of the allegations merits a formal hearing, the instructor must refer the matter to Step 2 for an Academic Honor Policy Hearing by submitting the "Academic Honor Policy Hearing Referral" form to the Office of the Dean of the Faculties.

Step 2. Academic Honor Policy Hearing. A panel consisting of five members shall hear the case. The panel shall include: one faculty member appointed by the dean from the unit in which the course is taught; one faculty member appointed by the Dean of the Faculties who is not from that unit; and two students appointed through procedures established by the Dean of Students Department. The panel shall be chaired by the Dean of the Faculties (or designee), who is a non-voting member of the committee.

The hearing will be conducted in a non-adversarial manner with a clear focus on finding the facts within the academic context of the course. The student is presumed innocent going into the

proceeding. After hearing all available and relevant information, the panel determines whether or not to find the student responsible for the alleged violation using the "preponderance of the evidence" standard. If the student is found responsible for the violation, the panel is informed about any prior record of academic honor policy violations and determines an academic sanction (and disciplinary sanction, if appropriate). In some cases, a Step 1 sanction may have been appropriately proposed prior to the convening of an Academic Honor Hearing. If the student is found responsible in these cases, the panel typically will impose a sanction no more severe than that which was proposed by the faculty member. The panel is required to provide a clear written justification for imposing a sanction more severe than the sanction proposed in Step 1.

The chair of the Academic Honor Policy hearing panel will report the decision to the student, the instructor, and the Dean of Students Department. The Dean of Students Department will report the decision to the University Registrar, if appropriate. If the student is found "responsible," this outcome will be recorded with the Dean of Students Department and becomes a confidential student record of an Academic Honor Policy violation. Records in which suspension or a less severe sanction (including all academic sanctions) is imposed will be removed five years from the date of the final decision in the case. Records involving dismissal and expulsion will be retained permanently, except in cases where a dismissed student is readmitted. Those records will be removed five years from the date of the student's readmission.

Sanctions

Step 1. This Step 1 procedure is implemented with first-offense allegations that do not involve egregious violations. The decision regarding whether an allegation is egregious is made by the Dean of the Faculties (or designee) and the instructor. The criteria used by the instructor to determine the proposed academic penalty should include the seriousness and the frequency of the alleged violation. The following sanctions are available in the Step 1 procedure.

1. Additional academic work
2. A reduced grade (including "0" or "F") for the assignment
3. A reduced grade (including "F") for the course

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

1. Additional academic work
2. A reduced grade (including "0" or "F") for the assignment
3. A reduced grade (including "F") for the course
4. Reprimand (written or verbal)
5. Educational Activities – attendance at educational programs, interviews with appropriate officials, planning and implementing educational programs, or other educational activities. Fees may be charged to cover the cost of educational activities
6. Restitution

7. Conduct Probation – a period of time during which any further violation of the Academic Honor Policy may result in more serious sanctions being imposed. Some of the restrictions that may be placed on the student during the probationary period include, but are not limited to: participation in student activities or representation of the University on athletic teams or in other leadership positions
8. Disciplinary Probation – a period of time during which any further violation of the Academic Honor Policy puts the student’s status with the University in jeopardy. If the student is found “responsible” for another violation during the period of Disciplinary Probation, serious consideration will be given to imposing a sanction of Suspension, Dismissal, or Expulsion. The restrictions that may be placed on the student during this time period are the same as those under Conduct Probation
9. Suspension – Separation from the University for a specified period, not to exceed two years
10. Dismissal – Separation from the University for an indefinite period of time. Readmission is possible but not guaranteed and will only be considered after two years from the effective date of the dismissal, based on meeting all admission criteria and obtaining clearance from the Dean of Students or designee
11. Expulsion – Separation from the University without the possibility of readmission
12. Withholding of diplomas, transcripts, or other records for a specified period of time
13. Revocation of degree, in cases where an egregious offense is discovered after graduation

Appeals

Decisions of the Academic Honor Policy Hearing Panel may be appealed to the Academic Honor Policy Appeal Committee, a standing four-member committee composed of two faculty appointed by the President and two students appointed by the Vice President for Student Affairs. The chair will be appointed annually by the President, and members will serve two-year renewable terms. In case of a tie vote regarding a case, the committee will submit a written report to the Provost, who will then make the final determination.

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

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

The procedures followed during the appeals process are:

1. The student should file a written letter of appeal to the Office of the Dean of the Faculties within 10 class days after being notified of the Academic Honor Policy Hearing Panel decision. This letter should outline the grounds for the appeal (see 1–5 above) and should provide supporting facts and relevant documentation.
2. The Academic Honor Policy Appeal Committee will review this letter of appeal and will hear the student and any witnesses called by the student, except in appeals based on consideration #5 above. The committee may also gather any additional information it deems necessary to make a determination in the case.

3. The Appeals Committee may affirm, modify, or reverse the initial panel decision, or it may order a new hearing to be held. This decision becomes final agency action when it is approved by the Provost. In cases where the student is found responsible, the decision becomes a confidential student record of academic dishonesty.
4. Appellate decisions are communicated in writing to the student, the instructor, the Office of the Dean of the Faculties, and the Dean of Students Department within 30 class days of the appellate hearing.

Academic Honor Policy Committee

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

Amendment Procedures

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

Grievance Procedure

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

Grievance Procedure: Panama City Campus

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

Notification of Students' Rights under FERPA

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

1. The right to inspect and review the student's education records within 45 days of the day the University receives a request for access. Students should submit to the registrar, dean, or head of the academic department (or appropriate official) written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes is inaccurate or misleading. Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception, that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is defined as a person employed by the University in an administrative, supervisory, academic, 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 a student serving on an official committee, such as a disciplinary or grievance committee. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the University discloses education records without consent to officials of another school in which a student seeks or intends to enroll.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

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

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

Release of Student Information

The disclosure or publication of student information is governed by the policies of 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 fulfill 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
8. As otherwise provided by law
- B. Subject to statutory conditions and limitations, prior consent of the student is not required for disclosure of certain types of information for:
 1. Portions of the educational record for which the student has signed a waiver
 2. Portions of the educational record that are exempted by law including records of law enforcement agencies of the University; employment records of a student within the University as long as the student's employment is predicated upon his or her status as a student; personal records of instructional, supervisory, or administrative personnel; and alumni records related to that student
 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
 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 Office of the University Registrar, A3900 University Center, Florida State University, Tallahassee, FL 32306-2480.*

Class Attendance

Attendance at the first class meeting is mandatory unless properly excused by the class instructor. Students who do not attend the first class meeting of a course for which they are registered will be dropped from the course by the academic department that offers the course. This policy applies to all levels of courses and to all campuses and study centers. **It remains the student’s responsibility to verify course drops and check that fees are adjusted.**

All students are expected to abide by the class attendance policy set forth by the instructor in each class in accordance with the *Faculty Handbook*. When possible, students also must provide advance notice of absences, as well as relevant documentation regarding absences, to the instructor as soon as possible following the illness or event that led to the absence. Any arrangement to make up work because of class absence is the responsibility of the student. The instructor, who will explain the evaluation (grading) statement at the beginning of the term, determines the effect of absences upon grades. 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 seventh week of classes without the permission of their academic dean, except when using a late drop. Consult the ‘Drop/Add’ section of the “Office of the University Registrar” chapter of this *Graduate Bulletin* for more details.

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 athlete’s sport for the remainder of the season. This policy includes required attendance and completion of all final examinations or evaluations for each class in which the athlete is registered. Student-athletes must remain in good academic standing in order to maintain eligibility during post-season games, the upcoming semester, and future competitive seasons. Arranging to make up work missed because of legitimate class absence is the responsibility of the student.

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

Religious Holy Days

Per section 1006.53, Florida Statutes, Florida State University’s policy on observance of religious holy days provides that students shall, upon notifying their instructor, be excused from class to observe a religious holy day of their faith. While students will be held responsible for the material covered in their absence, each student shall be permitted a reasonable amount of time to make up the work missed. Instructors and University administrators shall in no way arbitrarily penalize students who are absent from academic or social activities because of religious holy day observance. Students who allege that this policy has been improperly applied in specific instances may have their grievances addressed through the general academic appeals process. In this process, the student brings a complaint first to the instructor, then to the department chair, and finally to the academic dean appropriate to the course involved, stopping at the level at which the complaint is resolved. If no resolution is reached, the student brings the complaint to the attention of the Dean of the Faculties for either resolution or referral to the Student Academic Relations committee of the Faculty Senate. This committee has the authority to 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
- 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

Post baccalaureate 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 in each course.

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 under load 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.

International graduate students must enroll in at least nine (9) semester hours during each of the Fall and Spring semesters to maintain legal immigration status. An international student adviser may authorize a reduced course load in certain circumstances. Students who wish to enroll in a reduced course load for a given semester must submit a request for authorization to an adviser at the International Center before the end of the drop/add period for that semester. An unauthorized reduction in course load may result in serious immigration consequences. For a complete definition of the full course of study for immigration purposes, to access the reduced course load information and request forms, please refer to <http://www.internationalcenter.fsu.edu/>.

Faculty Degree Candidates

A faculty member of 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 Florida State University.

Undergraduate 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 academic dean of the field in which the course is taught.

Grading System

Definition	Grade	Quality Points Per Credit Hour
Excellent	A	4.00
	A-	3.75
	B+	3.25
Good	B	3.00
	B-	2.75
	C+	2.25
Average	C	2.00
	C-	1.75
	D+	1.25
Poor	D	1.00
	D-	0.75
	F	0.00
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 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 Florida State University will be excluded from the student's GPA. Permission for the Florida State University GPA to begin as a new calculation for graduate students shall be granted in the following admission/readmission circumstances:

1. When seven or more years have elapsed since a student was actively enrolled in a graduate degree program at Florida State University
2. A student has earned a master's/specialist/doctoral degree from Florida State University and is seeking a second master's/specialist/doctorate
3. A student has earned a master's/specialist degree from Florida State University and is seeking a doctorate in a different major

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

1. During any period of time less than seven years in which the student was not actively enrolled in a graduate degree program at Florida State University
2. A student has earned a master's/specialist degree from Florida State University and is seeking a doctorate in the same major

All requests for exception to this policy and its specifications must be endorsed by the students' academic dean and submitted to the Dean of 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 seven 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 through Florida State University's <http://campus.fsu.edu> Web site.

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

A student who is passing a course but has not completed all of the required work in the course at the end of the term may, in exceptional cases and with the permission of the instructor, be assigned a grade of "I". This may include excused absences from final examinations. Grades of "I" are not assigned to any courses if a student withdraws from the University, and should be used only in those exceptional cases when a student, for reasons beyond his or her control, has failed to complete a well-defined portion of the course. 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 and is so indicated on the student's permanent record. A grade of "I" or "NG" in a course that is approved for "S" or "U" grades only that is not removed by the end of the next term in which the student is enrolled will automatically become "U", unless the instructor notifies the Office of the University Registrar that there is to be an extension of time.

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.

Grade Appeals System

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

Step 1. Within 30 calendar days following the date that final grades are made available to students, the student must contact the instructor in question to discuss the grade and attempt to resolve any differences. The student should document any attempts to contact the instructor in order to establish that the appeal was begun within this 30-day period. In the event that the instructor is not available, the student should provide that documentation to the instructor's program or department chair. It is expected that the student will first attempt to resolve the grade dispute with the instructor; however, either the student or the instructor may consult with the appropriate program or department chair during this process.

Step 2. If no resolution is reached within this 30-day period, after the student's documented attempt, the student has an additional 15 calendar days to submit a written statement to the program or department chair. This statement must include an account of attempts to resolve the issue, as well as the evidence that forms the basis for the appeal.

Within 20 calendar days thereafter, the department or program chair will arrange for a meeting of a grade appeals screening committee composed of three students enrolled in the academic unit offering the course to review the appeal. Appropriate students who have no conflict of interest will be chosen to serve on this screening committee by a student organization associated with the program or department, if such an organization exists. If none exists or if members of such an organization are not available, the department or program chair will select appropriate students who have no conflict of interest. Both the student and the instructor may attend the meeting.

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

Step 3. Within 20 calendar days of a positive decision from the grade appeals screening committee, the program or department chair will appoint and arrange for a meeting of a grade appeals board. This board is composed of three faculty members and two students other than those who served on the screening committee. The purpose of this board is to determine whether or not to uphold the final grade assigned by the instructor. The board will consider only the evidence provided by the student and the instructor in making the determination. Both the student and the instructor may attend the meeting.

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

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

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 Office of the Dean of the Faculties. Appeals to this committee are made after all other available remedies have been exhausted.

Forgiveness Policy

Florida State University has discontinued the forgiveness policy for all students. Please refer to the 'Drop /Add or Change of Schedule' section in the "Office of The University Registrar" chapter of this *Graduate Bulletin* for additional information.

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 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 for consideration of special circumstances that the professor thinks constitute justification for an exception to this regulation, but under no circumstances will a student be allowed more than one additional term of probation. Owing to the differential uses of the designation, "academic probation" shall not appear on permanent records of regular graduate students. After one probationary period, however, a student whose average falls within the probationary range will receive automatic dismissal.

Readmission

Refer to the "Admissions" chapter in this *Graduate Bulletin* for readmission policies for returning students.

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" appears on the transcripts of students who properly withdraw within the first seven weeks of class. After that date, depending on the quality of work at the time of withdrawal, grades of "W" or "F" are 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 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*.

Readmission After Multiple Withdrawals

When a student has withdrawn from the University three (3) or more times, subsequent readmission will first be considered by a committee whose charge is to assess the student's capability of making satisfactory progress toward degree. This committee, appointed by the Council of Associate and Assistant Deans, will then make a recommendation to the dean of the student's college, who will make the final decision.

Guidelines for Field Placement Fitness

These guidelines apply to all student field placements, including internships, practicum experiences, and student teaching. The University has the authority to determine both the fitness of its students to be placed in field placements and the suitability of particular field placement sites. The academic judgment of qualified faculty, on issues relevant to the professional requirements of a given field, is critical to this process.

Students may either be denied a field placement or removed from a placement on the basis of the academic judgment of qualified faculty. Students have the right to be informed of the academic and non-academic requirements for obtaining a field placement early in their majors. They also have the right, except in emergency cases, to receive notice of their deficiencies and an opportunity to correct those deficiencies prior to a final decision. Students should consult the information provided by each specific college, department, or academic program of interest for more detailed information.

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.

Note: At the time of this publication, this policy was under review. Students should visit <http://withdrawal.fsu.edu/medical.html> for the most current information.

FACTS Information

All current and prospective students of higher education in the state of Florida may access the FACTS (Florida Academic Counseling and Tracking for Students) Web site. By logging on to <http://www.facts.org/> you can perform a variety of tasks, including the following:

- View a map indicating the location of every participating college or university
- Search course catalogs from all public and many private Florida colleges and universities, as well as all state community colleges
- 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
- 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

Florida State University seeks to provide students with opportunities beyond 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. 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: Eric Weldy

Associate Vice President for Student Affairs: Elizabeth P. Maryanski

The Division of Student Affairs is dedicated to helping students learn and develop into citizens committed to lives of leadership and service. The Vice President for Student Affairs and the staff are responsible for the following departments:

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 Life

Orientation

Student Disability Resource Center

Student Rights and Responsibilities

Victim Advocate Program

Withdrawal Services

International Center

LEAD Center

Office of Multicultural Affairs

Oglesby Union

Flying High Circus

Student Activities

Union Productions

Student Government Association

Thagard Student Health Center

University Counseling Center

University Housing and Child Development Programs

Some of these departments and their programs are highlighted below; however, for more complete information, refer to the *Florida State University Student Handbook* and the Division of Student Affairs Web site at www.studentaffairs.fsu.edu. The Handbook is available online at http://registrar.fsu.edu/student_handbook/apdefault.htm.

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

Assessment Services

Parking and Bus Services

Postal Services

Public Safety

Radio and Television

Seminole Dining

Students First

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 occupations which leverage their advanced degrees and meet their lifestyle goals. The unit's library provides students access to both computer-based and print career assessments as well as extensive information resources. The **Career Experience Opportunities Program** helps students explore career choices through various pre-professional internships, cooperative education work experiences, and part-time positions. 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 (e.g., writing curriculum vitae and interviewing). Placement services are offered also through career center branch offices in the colleges of Business and Engineering. The Career Center also has a state-of-the-art online Career Portfolio that enables students to document skills learned in graduate school and throughout their professional life. Finally, the Career Center maintains a strong research program through The Center for the Study of Technology in Counseling and Career Development. For further information regarding Career Center programs and service, please visit our Web site at <http://www.career.fsu.edu> or telephone (850) 644-6431.

Child Care

FSU Child Development Programs (FSUCDP) provide care and educational experiences for a limited number of children from ages 6 weeks to eleven years. Children of Florida State University students are given priority for enrollment. Space is limited, so please apply early. For additional information, contact *FSU Child Development Programs, 103 Student Life Building, 133 South Wildwood, Tallahassee, FL 32306-4174, (850) 644-2860; http://www.childcare.fsu.edu*.

FSUCDP also provides sites for research by faculty members and graduate students in a variety of areas as well as a laboratory setting in which students may observe or work with young children. For additional information, contact *FSU Child Development Programs, 103 Student Life Building, 133 South Wildwood, Tallahassee, FL 32306-4174, (850) 644-2860, Web site http://www.childcare.fsu.edu*.

The **Alumni Village Child Development Center**, located at *169 Herlong Drive*, in the University's apartment housing area, provides, for a fee, an early learning program for children two and one-half to five years of age. The hours are 7:30 a.m. to 5:30 p.m. Monday through Friday when classes at FSU are in session. For Alumni Village residents only, a free after-school program operates from 3:30 p.m. to 5:15 p.m. For additional information, please call (850) 644-8305.

The **Educational Research Center for Child Development**, located at *370 Hull Drive*, provides, for a fee, an early learning program for children two and one-half to five years of age. The hours are 7:30 a.m. to 5:30 p.m. Monday through Friday when classes at FSU are in session. The center also provides, for a fee, an educational program for children ages three to eleven years of age. The hours are 3:15 p.m. to 10:00 p.m. Monday through Thursday when classes at FSU are in session.

The **Infant and Toddler Child Development Center**, located at *330 Pennell Circle*, provides, for a fee, an early learning program for children ages six weeks to two and one-half years of age. The hours are 8:30 a.m. to 4:30 p.m. Monday through Friday when classes at FSU are in session. For additional information, please call (850) 644-0003.

Community and Public Service

Florida State University encourages students to become involved in community service and civic activities, as well as broaden their academic experience through service learning courses. The **Center for Civic Education and Service** promotes this vision by providing service opportunities and civic involvement for both students and faculty. The center operates a clearinghouse of service-related information, including a directory of nonprofit organizations, service learning classes, and student service organizations.

The center administers the FSU **ServScript** program, which allows students to record their community service hours on their official academic transcript. A transcript is a direct reflection of a student's collegiate

career to potential employers and graduate and professional schools. The ServScript goes hand and hand with **Service Learning** courses that link community service to the classroom curriculum. Service Learning courses are offered in numerous academic disciplines.

The center coordinates, advises, and supports many service projects and programs. In the Fall and Spring semesters, students are trained as **Youth Program** mentors and are placed in Leon County schools to improve reading, writing, math, and science skills. In addition, service events include the **Service Leadership Seminar**, **Into the Streets**, and **Make A Difference Tallahassee**. The center also coordinates weekly, student-led **Outreach Projects** that serve area nonprofit agencies. The center houses several student service organizations, which include: **Alternative Break Corps**, **FSU Service Corps**, **Habitat for Humanity**, and **International Medical Outreach**, **Alpha Phi Omega**, and **National Society of Collegiate Scholars**.

Florida State University and the Center for Civic Education and Service host several statewide programs that promote student involvement in community service and civic responsibility in education. Statewide initiatives include the **Community-Higher Education-School Partnership**, **Florida Campus Compact**, **Florida Learn and Serve**, and **VISTA**.

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

For more information, contact the *Center for Civic Education and Service, Division of Student Affairs, 930 W. Park Ave., Tallahassee, FL 32306-4180; (850) 644-3342; Fax (850) 644-3362; Web site: <http://www.serve2learn.fsu.edu>; email: service@admin.fsu.edu.*

Assessment Services

For information concerning Assessment Services, please refer to the 'Academic and Professional Program Services' section in "The University" chapter of this *Graduate Bulletin*.

StudentsFirst

StudentsFirst is a walk-up information and service 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 assists students and directs them to the office and personnel who can handle their specific problems. Students also may use StudentsFirst kiosks to access a variety of other self-service information. There are seven kiosks in various locations around campus.

In addition, StudentsFirst maintains a Web site that houses links to other important and useful sites for students, including Academic Information, Campus Life, Career Information, Computing and Telecommunications, Money Matters, and Student Services.

In coordination with Student Financial Services, StudentsFirst is also pleased to announce a new Web site with online tools and services for students. Students may access detailed records of tuition and fees, financial aid disbursement history, and tuition payment history. Please visit <http://mymoney.fsu.edu>.

Seminole Dining

Seminole Dining offers a variety of dining options for students, faculty, staff and guests. Choose from national brand favorites Pollo Tropical, Hardees, Einstein Bros. Bagels, Boar's Head Deli, Quiznos, Starbucks, or try FSU's own 24-hour Park Avenue Diner.

Residential restaurants—featuring unlimited servings of freshly made-to-order food

Athletic Training Table—University Center D

The Suwannee Room—William Johnston Building between Bryan and Reynolds Hall

Fresh Food Company—between Stone Building and Salley Hall

Retail Locations

Einstein Bros. Bagels—Oglesby Union

ZA Juice—Oglesby Union

On The Rock Ice Creamery—Oglesby Union

Miso Sushi and Noodle Bar—Oglesby Union

Hardees—Oglesby Union

Pollo Tropical—Oglesby Union

Quiznos—Oglesby Union

Park Avenue Diner—Woodward and Park Avenues in Student Services Building

Convenience Stores

Trading Post—Woodward and Park avenues

Boar's Head Deli & Convenience Store—William Johnston Building

Starbucks Locations:

FSU Bookstore

Strozier Library

Barrister's Bistro—College of Law

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

Health Care

Thagard Student Health Center (TSHC) provides primary out-patient medical care to students and their dependents age 13 years and older. Currently enrolled, fee-paying students are not charged for illness or injury office visits. Additional services and procedures such as lab, X ray, pharmacy, and physical therapy are provided at less-than-market rates. Other services include urgent care, general medical care, gynecology, psychiatry, allergy clinic, immunization, nutrition and health promotion, anonymous HIV testing.

TSHC's clinical staff includes board-certified physicians, psychiatrists, advanced registered nurse practitioners, registered nurses, pharmacists and dietitians. The health center has over 90 full-time employees and 50 part-time and student staff members.

All students must meet State Board of Education immunization requirements. Receipt of immunization documentation and health history forms must be completed prior to class registration.

Students interested in joining a student organization that can make a difference should consider the TSHC's Health Campus 2010 Committee. This committee makes recommendations to administration regarding the Improvement of services and provides suggestions for ways to better meet the needs of our students.

Incoming full-time students are required to have health insurance coverage. International students with F-1, F-2, J-1 or J-2 visa status must meet federal and state mandates for health insurance coverage. Florida State University sponsors a reasonably priced policy that meets these requirements. All students are encouraged to visit our insurance office or Web site to obtain information about available policies or check out our Web site. Medical care outside the health center facility is the financial responsibility of the student.

The **Health Promotion Department** is dedicated to assisting FSU students in making informed choices for their health and well-being through a number of services and programs, both individual and group-oriented. The Health Promotion Department provides educational materials and offers presentations upon request on a number of health related issues including tobacco, alcohol, sexual health, HIV/AIDS, nutrition, gambling, and stress. Professional staff and student peer educators also promote a number of national events such as the Great American Smokeout and National Collegiate Alcohol Awareness Week.

TSHC also sponsors the **Partnership for Alcohol Responsibility (PAR)**, a coalition of community and campus representatives who work to reduce the negative consequences of high risk alcohol use by college students through a variety of environmental prevention strategies that promote individual, community, and institutional responsibility.

All students are encouraged to visit the Thagard Student Health Center Web site at <http://www.tshc.fsu.edu> for more complete information, or call (850) 644-6230.

Counseling Services

The **University Counseling Center**, a department in the Division of Student Affairs, provides counseling services and programs to help

students achieve and maintain 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. Psychiatric consultation is also available. 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 University 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. Counseling sessions are by appointment, except in cases of emergency. Records of visits to The University 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 imminent 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 University Counseling Center is also a sponsor of safe zone, an ally organization for lesbian, gay, bisexual and transgendered individuals.

The University Counseling Center is located in the *Student Life Building, Suite 201*. 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 University 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 United States (US) Citizenship and Immigration Service and US Department of State rules, and serve as liaisons between students and these agencies.

The IC also serves international students, visiting scholars, and their families by orienting them to the University and the community and advising them on personal, social, and financial matters. The IC staff plan and conduct various workshops to address the needs of international students, as well as to help train faculty and staff to better serve those needs.

In addition, the IC offers the following programs that promote cultural awareness and understanding:

- **International Friends Program**—A program that links international students with campus and community members
- **Global Ambassadors Program**—A service that arranges for international students to speak on campus and in the community
- **Global Gatherings**—A discussion series on international topics
- **International Women's Group**—A social support group for wives and young children of international students and scholars
- **International Bazaar**—An annual event featuring food, cultural displays, and performances

- **English Conversation Club**—Informal classes to learn and practice conversational English (open to students, family members, and friends)
- **Global Cafe**—A weekly lunch in the Spring and Fall semesters featuring cuisine and culture from different countries and regions
- **IC Art Gallery**—An exhibition space for international artists from FSU and the community
- **Beyond Borders**—International service and cultural exchanges, coordinated through the center, with the University of Costa Rica, the University of the West Indies (Jamaica), and the Technical University-Dresden (Germany); the International Center is located at *107 South Wildwood Drive*; call (850) 644-1702 or refer to *ic.fsu.edu* for information
- **Coffee Hour**—A chance to unwind while enjoying good company, great conversation, and coffee or tea; meets on Fridays
- **International Education Week**—A national event held in November to celebrate international education in the U.S.; events and activities are held throughout the week

Center for Academic Retention and Enhancement (CARE)

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 from selected area schools to pursue 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 East Gadsden 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 implements a **Summer Bridge Program** through which a maximum of 300 disadvantaged and/or first-generation college students are enrolled as first-time freshmen at 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 6:30 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 7:00 a.m. to 6:00 p.m., Monday through Friday. Students with valid IDs may ride the Free Fare buses on StarMetro'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 Crime Prevention Section at 644-1388 or 644-3660.

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. All students holding University Post Office boxes should notify the University Post Office of any change of address when leaving campus.

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

Public Safety

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 online, with hard-copy available upon request. The *Safety Guide* describes all safety programs and security services available at the University. It contains safety tips and emergency telephone numbers, policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters, as well as campus crime

statistics. Copies are available through the FSU Police Department. The safety guide is available on the Web at www.police.fsu.edu/pdf/safety-guide.pdf.

The **Student Alert Force and Escort Connection (SAFE Connection)**, a bureau of Student Government, is available free to students, faculty, and staff. Escorts are available between 6:00 p.m. (or dark) and 3:00 a.m. seven days a week and are located at specific locations on campus. Arrangements for an escort should be made by calling 644-SAFE (7233).

The **Blue Light Trail**, comprising over 317 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 each evening from nightfall to 3:00 a.m., and serves campus and specific areas off campus. Arrangements can be made to be picked up by calling 644-SAFE (7233). For additional information concerning individual programs or services, please visit SAFE Connection at www.fsu.edu/~sga/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 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 Florida State University. One of the fastest growing PBS stations in the nation, it recently extended coverage to the western area of the state transmitting on Channel 56, **WFSG-TV**, Panama City.

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

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

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

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

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. For complete information on all campus recreation offerings, see <http://fsu.campusrec.com>.

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

The **Intramural (IM) Office** is a resource for over 50 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. FSU will also soon be unveiling a new intramural field complex offering expanded outdoor space for added intramural and sport club activities. 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 <http://fsu.campusrec.com/sportclubs/> 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 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, or visit <http://www.deanofstudents.fsu.edu>.

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

The **Orientation Office** offers more than 25 different sessions each year to accommodate the needs of incoming students. Every undergraduate student new to 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 adviser 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 Florida State University, call (850) 644-2785, or visit <http://www.orientation.fsu.edu>.

The **First Year Experience Program (FYE)** assists new student by offering a course, AMS 1363, that deals with transition issues, academic success, health and safety, student involvement, values and leadership, and knowledge of campus resources. FYE classes are offered during Summer "C" session and the first part of the Fall semester, and are one credit, satisfactory/unsatisfactory based. FYE classes are

small, personalized and highly interactive. The course is taught by an instructional team that includes an undergraduate peer leader and utilizes a new customized textbook. For additional information please call the FYE Office at (850) 644-8707, visit 4326 A University Center, or check online at <http://www.fye.fsu.edu>.

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

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, or visit <http://www.deanofstudents.edu/withdrawal>.

Staff of the **Victim Advocate Program** provide advocacy to victims of 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 Florida State University's 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, or visit <http://www.victimadvocate.fsu.edu>. 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 Association, and the Multi-Cultural Greek Council. Fraternities and sororities at 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. For information call (850) 644-9574, or visit <http://www.greeklife.fsu.edu>.

Student Government

The **Student Government Association (SGA)** is the student's voice at Florida State University. SGA allocates approximately \$9.2 million of activity and service fees. These funds support the Leach Center, Oglesby Union, 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 serve their fellow students and the University. For more information, call (850) 644-1811 or stop by 205 OGC.

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

The **Congress of Graduate Students (COGS)** is the elected representative body of all post-baccalaureate, graduate, professional and doctoral students at the University. COGS is the unified voice and advocate for all graduate related matters. It also offers travel grants to graduate students,

funds graduate organizations, and sponsors a variety of programs and services, including a computer lab for students. For further information, call (850) 644-7166 or stop by 242 SLB.

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 Torch*, which informs students about the services offered by the Student Government Association. The office also designs Web sites, 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; automatic teller machines; information desk; student organization offices; meeting rooms; auditorium; and ballrooms. Located in the Oglesby Union complex are retail food outlets, an Advising First center, post office, copy shop, and computer lab.

Another facet of Oglesby Union is the **Student Activities Center (SAC)**. Two major components of the SAC include Student Organization Services and Union Productions. **Student Organization Services** provides student support services for over 385 registered clubs and organizations. The Student Activities Center staff provides training and development for students and advisers, as well as monthly programs and activities. In addition, students can take advantage of resources such as copying, faxing, storage space, campus mailboxes, and meeting space.

Students who participate in **Union Productions** provide leadership and direction in all facets of social, cultural, and educational programming. Students gain experience in booking events, marketing and advertising, hospitality, staffing large shows, and a variety of leadership skills. Union Productions sponsors a variety of programs including comedy, daytime programming, culture and the arts, concerts, and many other fun and educational activities.

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

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: Joseph Travis; **Associate Deans:** Sam Huckaba, Lois Hawkes, Joseph McElrath, Joseph F. Owens III

The oldest college at the University, the College of Arts and Sciences has provided generations of undergraduate students instruction in the liberal arts disciplines that are essential for intellectual development and personal growth. Graduate degree programs in the College of Arts and Sciences grew organically from these strong undergraduate roots, and the contributions of the college to graduate education have been integral to the evolution of the University. The first recorded master's degree at the Florida State College for Women was awarded by the College of Arts and Sciences in 1911, and the first doctorate at Florida State University was awarded in chemistry in 1952.

The College of Arts and Sciences comprises over 30 departments, institutes, centers and interdisciplinary programs. In addition to awarding bachelor's, master's, and doctoral degrees and heavily supporting the Liberal Studies Program, the College of Arts and Sciences offers an extensive array of foundation courses for pre-professional and professional programs.

Faculty within the college have earned national and international recognition for research, teaching, and distinguished service to the profession. Among the faculty are members of the National Academy of Sciences, Nobel Laureates, a Pulitzer Prize winner, and recipients of numerous other national and inter-national honors.

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

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. 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 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, many students are supported by graduate assistantships. In addition to being eligible for the assistantships, students in the College of Arts and Sciences may apply for various types of graduate fellowships. Each year, a number of arts and sciences students receive University fellowships,

College Teaching Fellowships, and fellowships awarded by national organizations. The application deadline for most fellowships is January 15th for awards beginning the following academic year.

Requirements

The College of Arts and Sciences offers the master of arts (MA), the master of fine arts (MFA), the master of science (MS), and the doctor of philosophy (PhD). In addition to reviewing the requirements highlighted below, students should consult all University-wide degree requirements and academic procedures for the master's and PhD degrees as summarized in the "Graduate Degree Requirements" chapter of this *Graduate Bulletin*.

Admissions Criteria

Students who wish to pursue graduate study in the College of Arts and Sciences must apply through the Office of Admissions and must be accepted for graduate study by the intended department or program. 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, or 80 or better on the Internet-based test) 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. Non-thesis type master's program students who have not previously registered for the comprehensive examination must do so the final term.

Clearance for Degrees

During the first 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. The completed thesis or dissertation manuscript 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: Caryn Beck-Dudley; **Associate Deans:** Joe D. Icerman, Patrick F. Maroney

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 with a major in risk management and insurance, master of science (MS) in management information systems, and doctor of philosophy (PhD) in business administration. The College of Law and the College of Business offer a joint-degree program leading to the juris doctor (JD) and the master of business administration (MBA) degrees.

The master of business administration program is offered on a part-time and full-time basis, as well as online. A part-time MBA program is also available at the Panama City Campus. An on-campus MBA student may choose to concentrate their elective options in finance, marketing and supply chain management, or general business. Online MBA students may choose a concentration in general business, real estate, or hospitality administration. Other opportunities are available to students with undergraduate degrees in accounting and management information systems.

The master of accounting program is designed to allow the student to major in either assurance services, accounting information systems, corporate accounting, or taxation. This program provides students with greater breadth and depth in accounting education than can be accomplished in the baccalaureate program. Although the MAcc program is designed as a full-time program, students may choose to complete their course work on a part-time basis.

The master of science in management program with a major in risk management and insurance offers a concentration in property and liability insurance. This program is available entirely via the Internet and is designed for working professionals.

The College also offers an Internet-based master of science in management information systems. The program is designed so that a typical student can complete the degree in 24 months by taking two online courses each semester. Students may choose to complete either a managerial track or a technical track.

The objective of the doctoral program in business is to prepare students for careers in university teaching and research, as well as for selected administrative and research positions in industry and government.

Students receive the doctor of philosophy in business administration degree and concentrate in accounting, finance, management information systems, organizational behavior and theory, strategic management, marketing, or risk management and insurance.

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

Institutes and Centers

The **Jim Moran Institute for Global Entrepreneurship (JMI)** in the College of Business at 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 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, 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 Stroz 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 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 undergraduate upper-division accounting GPA is also considered.

MBA Program: Forty-two (42) semester hours for the full time, part-time, and online programs. For full-time students, the three semester program begins the Summer term (early May), and the application deadline is February 1st. For part-time students, the program begins the Spring term (early January), and the application deadline is October 1st. The online program begins the Fall term (late August). The application deadline is June 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 in Tallahassee and at the Panama City branch campus.

Master of Science in Management Program with a major in risk and insurance is an online, corporate program designed for the insurance professional and requires completion of thirty-three (33) semester hours of graduate level course work. The MSM in RMI begins only in the summer term. It is offered on a distance-learning basis, via the Internet, to allow the working professional to obtain the degree. Deadline for receipt of all application materials is March 1.

Master of Science in Management Information Systems Program: The management information systems major requires completion of thirty-three (33) semester hours. This program is offered only in an online format. Applicants must have at least three years of IT-related work experience, as well as the following prerequisite knowledge or skills; working knowledge of at least two programming languages such as C, C++, Java, Visual Basic, etc.; proficiency in at least one programming language at a level comparable to an entry-level professional programmer in that language; and knowledge of basic statistical concepts (descriptive statistics, regression and hypothesis testing).

Master 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: 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, P.O. Box 3061110, 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 Florida State University emphasizes the application of various business and management concepts to the decision-making process. The curriculum also exposes the student to the various functions of business and management, recognizing that the career of a successful manager will span multiple functions. This exposure not only provides students with an understanding of the interrelationships among various business and management operations and decisions, but it also provides a sound foundation for growth and development through subsequent experience and education after graduation.

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 should 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-two (42) 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	Organizational Behavior
MAN	5501	Operations Management
MAN	5601	Multinational Business Operations
MAN	5716	Business Conditions Analysis
MAN	5721	Strategy and Business Policy
MAR	5816	Marketing Strategy

The remaining three (3) courses are electives. The College of Business offers three options for MBA electives; three (3) courses in finance, three (3) courses in marketing and supply chain management, or any 3 electives chosen from these areas. With the approval of the academic dean for graduate programs, other opportunities are available to students with undergraduate degrees in accounting and management information systems. The finance electives consist of investment management and analysis, multinational financial management, and financial modeling and forecasting. 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.

The online MBA program offers concentrations in general business, real estate, and hospitality administration. Elective course work required for the general business area includes investment management and analysis, business to business sales and marketing, and employee benefit plans. Concentration courses for real estate are real estate and its legal environment, topics in real estate finance and appraisal, and real estate investment. For a concentration in hospitality administration, electives are financial and cost control systems for hospitality and tourism organizations, legal environment of hospitality and tourism organizations, and services and marketing research for hospitality and tourism.

Master of Science in Management

Master of Science in Management Program with a major in risk and insurance is an online, corporate program designed for the insurance professional. It requires completion of thirty-three (33) semester hours of graduate level course work and is offered on a distance-learning basis,

entirely through the Internet, to allow the working professional to obtain the degree. The focus is on property and liability insurance. All 11 courses which comprise the program can be completed in 24 months and taken from anywhere in the world. Quality and convenience are paramount. The curriculum recognizes that industry professionals are not involved solely with insurance issues – they must face difficult financial, ethical, legal, and global concerns as well. The program structure, therefore, hones a student's ability to analyze these issues from different perspectives, fosters critical thinking, and engenders the discipline needed to become a successful manager.

Master of Science in Management Information Systems

The management information systems major requires completion of thirty-two (32) semester hours. Applicants must have successfully completed a course in statistics, calculus, and two programming languages such as visual basic and C++ to qualify for admission. Work experience is also a requirement. The MS in MIS program is primarily designed for students who want to manage in technology oriented environments. It is offered primarily as a full-time program; however, students may attend on a part-time basis under certain circumstances.

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, 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, P.O. Box 3061110, Florida State University, Tallahassee, FL 32306-1110 (gradprog@cob.fsu.edu).* Students interested in the JD/MBA should also contact the director of Admissions, College of Law, Florida State University, Tallahassee, FL 32306-1610, 850-644-3787.

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 nonbusiness discipline or from another business discipline.

A minimum of one year of teaching and/or research is required of all candidates for the doctor of philosophy in business administration degree.

Preliminary Examinations

Comprehensive written examinations are given over the primary and support areas upon completion of all 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 Dean:** Gary R. Heald (Academic Affairs); **Assistant Dean for Student Affairs:** Barbara C. Robinson

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 Florida State University.

The roles of the College of Communication are: 1) to study human communication 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 an 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 members 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 <http://comm.fsu.edu/commdis/> and 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 <http://comm.fsu.edu/commdisdept/> and 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 research and service facilities.

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 and Voice 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. Computer-interfaced instrumentation is available for measuring vocal intensity and pitch, aeromechanical aspects of voice and resonance, and physiological functioning of respiration and the vocal apparatus. The **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. 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 assistance to families and professionals. The center also trains professionals and pre-professionals who serve, or are preparing to serve, the client population.

The Language and Literacy Lab has tests and materials available for assessing language and literacy development. Audio-video equipment, computers, and software are available for the development and evaluation of curriculum materials in the lab and in the field. Wireless headphone systems allow multiple instructional lessons to be delivered simultaneously in classrooms in investigations of vocabulary, phonological awareness, and phonics instruction.

The Neurolinguistic-Neurocognitive Research Center is an interdisciplinary laboratory located in the Rehabilitation Center of Tallahassee Memorial HealthCare. A wide array of equipment and software is available to measure cognition and language. A GaitRite system assesses 30 parameters of gait in studies of the effects of cognitive load on posture, gait, and balance. A Biopac system is used to measure a variety of physiological parameters including EEG, EMG, EKG, respiratory, and cardiac function.

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 with field production cameras and recorders in each of those formats; computerized on and offline editing, digital video effects, and computer animation capabilities; nonlinear 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 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 Web site, 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 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 multiple 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. Assistantships typically provide assistance with matriculation fees.

In addition to University fellowships, the college administers various awards. For example, 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.



COLLEGE OF CRIMINOLOGY AND CRIMINAL JUSTICE

Dean: Thomas G. Blomberg; **Director of Undergraduate Studies, Criminology and Criminal Justice:** William Bales; **Director of Graduate Studies, Criminology and Criminal Justice:** Gary Kleck

Florida State University's College of Criminology and Criminal Justice is the oldest program of its kind and is one of the world's foremost centers of scholarship and teaching related to problems of crime and the administration of justice.

The College is home to some of the nation's premiere scholars in criminology and criminal justice. Some of the areas of research for which faculty are well known include law enforcement, corrections, courts, juvenile justice, victimology, gun control, self-control and crime, urbanization and crime, and fear of crime. FSU also leads the nation in funding for research on education and delinquency. The faculty are among the best in the nation in terms of scholarly productivity, and PhD graduates from FSU have a very high level of publication in scholarly journals.

The **Center for Criminology and Public Policy Research** boasts \$11 million in externally funded research projects, and conducts ground-breaking research that promotes evidence-based policy-making and practice at state and national levels. It also provides unique hands-on research opportunities for graduate students.

The College holds the editorship of *Criminology and Public Policy*, an official publication of the American Society of Criminology. This prestigious publication is a peer-review journal devoted to the study of criminal justice policy and practice. Graduate students serve as the managing editor and assistant to the editor.

In addition, the college publishes the *Journal of Drug Issues*, one of the oldest journals in the field. It is a refereed publication widely used by research scholars, public policy analysts, and those involved in the day-to-day struggle against the problem of drug abuse. Each year, a graduate student holding the Richard Rachin Fellowship assists in editing the journal.

Faculty and students benefit from a research community that appreciates the value of diversity, and our capital city location provides students and graduates with unique research, data access, and employment opportunities. Access to state and federal courts and correctional facilities; the Florida legislature and its committees; the Office of the Governor; the attorney general; the Florida Department of Law Enforcement; the departments of Corrections, Probation and Parole, and Juvenile Justice; and a number of related private firms serve to enrich the graduate experience.

The graduate programs emphasize the importance of scientifically rigorous research that advances the knowledge of the discipline and informs public policy. The master's program prepares students for an administrative or research career in the criminal justice system and other related areas. The doctoral program trains individuals as critical scholars and prepares them for a career of teaching and research or for a higher-level research or administrative career in the criminal justice system.

The College of Criminology and Criminal Justice offers graduate degree programs leading to the master of science (MS), master of arts (MA), and the doctor of philosophy (PhD) degrees. In addition to the criminology degree programs, joint master's degree programs are offered in public administration and social work. For the most current information, go to the College's Web site at <http://www.criminology.fsu.edu/>.

Scholarships, Awards, and Financial Aid

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

In addition to these awards, the College offers the Robert L. Clark Scholarship, Jerry A. and Caroline S. Glass Scholarship Award, Joe Harris Memorial Teaching Fellowship, Ernest Kearns Ponce De Leon Memorial Scholarship, Richard Rachin Fellowship, and the Gordon P. Waldo Fellowship. These awards are made on an annual basis but may

be continued for a second year and carry no work assignment. Students interested in these awards should apply through the Office of the Dean, College of Criminology and Criminal Justice.

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

Admission Requirements

All regular requirements of the University must be met. The College of Criminology and Criminal Justice will exercise discretion in admitting students from among those who meet the minimum criteria specified below.

Applications for Fall and Spring semesters are accepted, though admission in Fall is recommended. To receive full consideration for admission and funding, application materials must be received by February 15. Applications are accepted through July for Fall and November 1 for the Spring. 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 Examination (GRE) score, transcripts of all undergraduate and graduate study, three letters of reference from persons familiar with their academic performance and potential, and a personal statement between 300 and 500 words in length. A minimum 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

Doctoral students may be admitted either upon completion of their baccalaureate degree, or upon completion of a master's degree (MA or MS). Those entering the program with only a bachelor's degree must have a cumulative GPA of at least 3.5, and must maintain a GPA of 3.5 or higher throughout the master's course work. Those entering with a master's degree must submit evidence of a completed degree program, a copy of their thesis or equivalent research paper, and must have a 3.5 cumulative GPA for their master's course work.

Degree Requirements

All Graduate Students

All regular requirements of the University must be met.

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

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 any two of the following three research methods courses: CCJ 5707, 5709 and 6741.

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 twenty-seven (27) semester hours of course work **and** six (6) semester hours on a master's area paper; this option may include an oral defense of the area paper at the discretion of the student's supervisory committee.

In each of these options, there must be a minimum of twenty-four (24) semester hours earned within the College of Criminology and Criminal Justice. This includes course work, thesis, or area paper. Twenty-one (21) of the hours must be graded hours.

The College of Criminology and Criminal Justice features Web-based courses that permit graduate students to earn a master's degree without coming to campus. Additional information about this opportunity is available at: <http://www.criminology.fsu.edu/>.

Master of Arts

Students studying for the MA degree may follow any of the three MS options. Please note, though, that the MA comprises the additional requirements that course work must include at least six (6) semester hours of humanities credit, and that 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. PhD students must also fulfill the University residency requirement of completing twenty-four (24) semester hours within a twelve month period. Qualification for PhD candidacy is established upon the passing of written comprehensive examinations in three areas: theory, research methods and statistics, and a substantive area approved by the student's committee. Theory and methods exams are graded by college-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) semester hours of dissertation credits will be earned by all doctoral students. Completion and successful oral defense of the dissertation will lead to the awarding of the PhD.



COLLEGE OF EDUCATION

Dean: Marcy P. Driscoll; **Executive Associate Dean:** David Foulk;
Associate Deans: Barbara Edwards, Lynn Wicker

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.

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
- Evaluation and Measurement
 - Research and Evaluation
- 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
- Instructional Systems
 - Certificate in Educational Technology
 - Certificate in Online Instructional Development
 - Certificate in Program Evaluation

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 Childhood Education, Reading, and Disability Services

- Early Childhood Education
- Elementary Education
- Emotional Disturbance/Learning Disabilities
- Education of the Mentally Handicapped
- Reading Education and Language Arts
- 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, 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

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 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 colleges:

- Art Education (College of Visual Arts, Theatre, and Dance)
- Communication Disorders (College of Communication)
- Educational Media Specialist (College of Information)

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), or have passed the General Knowledge Test
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.
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 Pre-service 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 course work 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 adviser for specific course requirements.

Continuation and Graduation Requirements of a Teacher Education Program

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

1. Maintain an overall GPA of 3.0 or above in all 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 pre-professional level, which includes the knowledge, skills and dispositions necessary to help all students learn
- AND**
7. Obtain final approval of the appropriate academic program and the Office of Academic Services

Recommendation for a Teaching Certificate

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

Office of Clinical Partnerships (Student Teaching)

Director: Dr. Connie Gaede

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 Florida State University
3. Successful completion of subject area specialization and professional education course work outlined under 'Subject Area Specialization/Professional Education/Clinical Experience Curricula'
4. Completion of departmental requirements in computer literacy
5. An overall GPA of 3.0 in all graduate program course work (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: TBA

The College of Education **Office of Minority Affairs** takes the lead in assisting the College of Education at 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.

FAMU—FSU COLLEGE OF ENGINEERING

Dean: Ching-Jen Chen; **Associate Deans:** Reginald Perry, Norman Thagard; **Assistant Dean:** Braketta Ritzenthaler; **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 Florida State University. Graduate programs of study lead to the Master of Science (MS) degrees and Doctor of Philosophy (PhD) degrees in biomedical, civil, chemical, electrical, industrial and mechanical engineering. A student entering the college applies for admission at one of the two universities and must satisfy the admission and general degree requirements of the University, the college and the department respectively. The degree is granted by the College of Engineering through the university where the student is registered.

The mission of the College of Engineering is:

- to provide an innovative academic program of excellence at both the undergraduate and graduate levels, judged by the highest standards in the field and recognized by national peers
- to attract and graduate a greater number of minorities and women in professional engineering, engineering teaching and research

AND

- to attain national and international recognition of the College through the educational and research achievements and the professional service of its faculty and students

Facilities

The College occupies over 200,000 ft.² of classroom, office and laboratory space in a building complex especially designed for engineering education. It is located off the main campus of each university in an area adjacent to Innovation Park, which also houses the National High Magnetic Field Laboratory, the Center for Advanced Power Systems and other university, public and private organizations engaged in research, development and clean industry operations.

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

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

Library

The main book and journal collections for engineering are housed in the Dirac Science Library at Florida State University and in the Coleman Library at Florida A&M University. The College also maintains an engineering library resource and reading room (sometimes referred to simply as engineering reading room or college library) that functions as a satellite to the two university libraries relative to engineering needs. Collections at the college library include monographs, texts and reference works that directly support instruction and research at the college. Library computer facilities enable extensive electronic literature search throughout the university libraries and other sources. Library services include literature search training sessions for students and faculty. The college library is headed by a full time librarian who is also a staff member of one of the two university libraries. Other college library personnel include assistants supported by the college.

Computing Facilities

Students at the college have access to a large number and variety of computing resources in the College of Engineering. Due to the unique requirements of engineering computing and the off-campus location of the college, the college is relatively autonomous in providing service to engineering students.

The college has over 2,500 computing devices connected to its local network managed by the college's Computing and Multimedia Services (CMS). Over 220 of these machines for general student use are high-end Pentium class workstations supported by a cluster of Sun Enterprise Series servers and RAID storage system. Computer labs connect to the college's gigabit fiber-optic backbone via 100Mbps Ethernet connections. One of the computer labs is open 24 hours a day, 365 days a year;

the other three are used as classrooms and are maintained open with technical support over 70 hours per week. The college also provides computing facilities in the public areas that are available to students 24 hours a day 365 days a year. Additionally, both universities provide on-campus facilities that are available to all students. Software includes major general purpose packages as well as special applications oriented toward particular disciplines.

The college's research labs contain dozens of machines clustered together to provide enhanced research capabilities including complex number crunching for simulations.

The college's computing infrastructure uses a gigabit core Layer 3 switch to connect all communications via gigabit fiber optic cables. The college Internet connection is a gigabit link connecting through the Florida State University backbone (FSU acts as the Internet Services provider for the college) allowing for faster access to the Internet2, Florida Lambda Rail, and NSF's vBNS network. Florida A&M University's computing facilities are also connected to the Tallahassee MAN, thus providing a link to the college for its students. In addition to local Ethernet network, the college has set up a wireless server infrastructure with access points in the college atriums for students who may want to use their own laptops to connect to the college's computing resources.

The college also provides remote dial-in capability to all student, faculty and staff. The dialup hardware consists of a remote access server allowing up to 23 concurrent dial-up users. This allows the users to perform research and other activities from remote sites.

The college has state of the art instructional classrooms all equipped with multimedia equipment. Three classrooms are prepared as computer classrooms. The instructional computer facilities include: a LCD projector, overhead projector, a document camera, a VCR, an amplifier and a set of high quality speakers. The ceiling mounted LCD projector is used for large-scale projection, linked to the PC at the instructor's console with a 100 Mbps Ethernet connection. A special Florida Engineering Education Delivery System (FEEDS) classroom has two studio cameras and one document camera connected to a desktop PC with a scan converter to display Web pages. A two-way live videoconferencing link via dedicated Fractional T-1 to the FSU Branch Campus in Panama City, Florida, provides interactivity to synchronous distance delivery of classes to those students.

The Real Video G2 server is used to stream live and recorded programs, classes and events from the college. The Poly Com VS4000 provides for 4-point IP videoconferences.

Supporting Facilities

The college participates in several research centers, both within the college and in cooperation with other departments, intended to foster learning opportunities for students and research advancement by noted faculty. They include the Center for Advanced Power Systems (electrical and mechanical engineering), the Center for Intelligent Systems, Control and Robotics (mechanical and chemical engineering), the Center for Materials Research and Technology (physics), the Center for Nanomagnetism and Biotechnology (chemical, biomedical and mechanical engineering), the Computation Science and Information Technology Center (computer science and mechanical engineering), the Florida Advanced Center for Composite Technologies (industrial engineering), the Geophysical Fluid Dynamics Institute (physics), the Industry/University Cooperative Research Center (industrial engineering), the Institute of Transportation Technologies (civil engineering), the Multidisciplinary Design Center, the National High Magnetic Field Laboratory (mechanical engineering and physics). Other specialized laboratories are included in the various departmental listings.

Opportunities

A large number of graduate students in the College of Engineering are supported through department teaching or research assistantships. University fellowships are available for exceptionally qualified students. In addition, tuition waivers for graduate assistants and fellows are available on a competitive basis. Students should contact the department of their proposed major regarding financial support.

Master of Science Degree

The departments of Chemical and Biomedical, Civil and Environmental, Electrical and Computer, Industrial and Manufacturing, and Mechanical Engineering offer both thesis and non-thesis programs for the Master of Science degree. The thesis-based programs are designed to provide the student with advanced course work and experience in the chosen engineering discipline. The non-thesis programs are designed to provide the student with a strong technical education with less emphasis on research. The thesis programs are appropriate for a student who plans to engage in research or to continue graduate studies for the doctoral degree. Candidates for the master's degree must satisfy all regulations and requirements of the department in which they enroll. 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 biomedical, chemical, civil, electrical, industrial, and mechanical engineering.

Admission Requirements

A candidate must meet the following minimum criteria to be considered for admission into the graduate program:

1. 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.

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



COLLEGE OF HUMAN SCIENCES

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

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

Historically, the college has been a national leader in graduate education and research. Courses in the human sciences, formerly home economics, have been offered at 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.

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 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.) Additionally, the Eminent Scholar Chair for the Director of the FSU Family Institute is currently held by Frank Fincham.

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) chemical, analytical, and microbiological laboratories for food and nutrition science majors; 5) the exercise physiology laboratory for monitoring the effect of exercise on metabolism for nutrition and fitness majors; 6) the motor learning/control laboratory for the study of cognitive processes and neural mechanisms controlling

movement; 7) chemical and physical textile laboratories with a conditioning room and sensory evaluation laboratory; and 8) 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 therapy through the academic common market, which allows their students to pay in-state tuition. Prospective out-of-state students may contact the college to 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
- Residential Science
- Retail Merchandising
- Textiles

Family, Child, and Consumer Sciences with the following area of emphasis:

- Child Development
- Family and Consumer Sciences Education
- Family Relations

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 Product Development
- Family and Child Sciences
- Family and Consumer Sciences Education
- Food Science
- Human Nutrition
- Retail Merchandising Textiles

Movement Science with majors in:

- Exercise Physiology
- Motor Behavior
- Neuroscience

Marriage and the Family

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 and masters 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 members in the College of Human Sciences have developed policies for the doctoral degree programs in compliance with the University's policies. Refer to the "Graduate Degree Requirements" chapter of this *Graduate Bulletin* for information about diagnostic examination, residence, program of 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.

Certificate Programs

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.

The graduate certificate in apparel design provides graduate level competency in advanced design of fashionable and functional apparel for academically talented students who are completing an undergraduate degree in apparel design. The culminating activity of the certificate is an internship or supervised research experience in apparel design.

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

The apparel design and retail merchandising certificate programs are designed to be completed concurrently with the Bachelor's degree and allow students to double-count four graduate courses (12 hrs.) for both the BS and the graduate certificate.

The certificate program in residential development is a specialized curriculum for Housing: Residential sciences graduates who need the knowledge, skills and abilities to provide for the effective creation, delivery and management of housing projects. Creating housing for communities that meet market needs and satisfies community expectations is a necessary requirement if graduates are to perform and compete in today's market. Students who are pursuing a Bachelor's degree may count the required twelve (12) hours in meeting the BS degree and may also apply these 12 credits to a graduate program in Housing.

Combined Degree Program

The Department of Nutrition, Food and Exercise Sciences offers a combined Bachelor's/Master's degree program that will enable outstanding undergraduate athletic training/sports medicine majors, through the College of Human Sciences to obtain a Bachelor's and a Master's degree after successfully completing a minimum of 148 semester hours. The program is designed for the student who wishes to continue his/her education in NFES past the undergraduate level to earn both a Bachelor's degree and a Master's degree.



COLLEGE OF INFORMATION

Dean: Larry Dennis; **Associate Deans:** Robert Brooks, Corinne Jorgensen

The multi- and inter-disciplinary domains represented in library and information studies offer some of the most diverse and rewarding professional opportunities available today. Powerful information technologies have fundamentally changed the nature of how information is produced, distributed, acquired, organized, stored, and preserved. We live in an increasingly interconnected information world, with technologies such as the Internet, personal computers, and wireless devices significantly changing how we connect people and information.

The College of Information offers myriad opportunities to blend concerns for people's need for information with complex and highly sophisticated technology. A critical function of the information professions is to serve as a bridge between people, information, and technology, ensuring that information systems are designed to foster and empower users, and that the information technology used is reliable, robust, affordable, and flexible. Information professionals ensure that people can access the information they want and need within the context and concerns of security and privacy, intellectual property, and information policy.

The College of Information at Florida State University is one of the top-ranked information studies programs in the nation. Its creative and innovative programs, based on well-established traditions, are dynamic and evolving within the ever changing global networked society.

Established in 1947 as a professional school, the College of Information now offers both undergraduate and graduate education. The master's degree program in library and information studies is accredited by the American Library Association, and the college is a member of the Association for Library and Information Science Education (ALISE). The college was authorized in 1968 to offer the doctor of philosophy degree and in January 1997 to offer the specialist degree.

The college's energetic faculty members are highly visible in professional organizations and societies, professional conferences, and publications, as well as in conducting significant research projects. This professional activity translates directly into a rich, intellectual environment that amply rewards students in their future career options. Our graduates are well-prepared to work in libraries, government agencies, corporations, and within any organization that has a significant need to bring people and information together.

Facilities

The College of Information resides in the Louis Shores Building, which houses classrooms, computer laboratories and administrative offices. The **New Technology (NT) Laboratory** includes small-scale Local Area Networks, experimental servers, digital video equipment, and other cutting-edge technology. It provides students an opportunity to gain hands-on experience in network administration, UNIX server administration, multimedia resource production, and it is used for special independent and group projects under the supervision of faculty and staff. Made possible in part by a grant from the Kellogg Foundation, the **Usability Center** is a fully equipped usability laboratory for conducting, observing, recording and analyzing usability evaluations. The iSpace computer cluster and learning lab provides local and distance students with access to a modern Web development environment with scripting language and database access, media production facilities and a flexible virtual computer environment for experimenting with and using modern information technology tools. Also located in the Louis Shores Building is the Harold Goldstein Library, which houses professional materials and juvenile and young adult literature collections. The library provides students with a setting for internship and practicum experiences that focus on all aspects of library operations. The College provides wireless connections to the University's communication system.

Scholarships, Awards, and Financial Aid

There are a number of financial aid sources which are administered by the college, as well as those sources administered by the University. Applications and criteria for selection may be obtained through the College's Web site or by writing, emailing or calling the college.

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

Scholarships and Fellowships. The college administers a program of scholarships resulting from the generosity of alumni and other friends. To be considered for a scholarship, students must submit the college's application for scholarships. The application and information about specific scholarships and fellowships is provided on the college's Web site: <http://www.ci.fsu.edu>. In addition to these sources, prospective students should consult the Web site of the American Library Association, <http://www.ala.org>.

Stipulations for All Incoming Graduate Students

Laptop Computer Requirement for Main Campus Students. All main campus graduate students in the College of Information are required to provide their own laptop computer and appropriate software. Students not enrolled on the main campus may use a desktop or laptop computer. Specific information about technical requirements may be found on the college's Web site at <http://www.ci.fsu.edu>.

Synchronous Activities for Online Courses. Online courses typically meet for a scheduled day/time each week during which students participate in synchronous online activities. These scheduled days/times are published on the course schedule each semester. Adherence to this schedule may vary from course to course. Students should check with the instructor for information about the mode of instruction for a particular course.

Master's Degree Program

Students will gain the basic theoretical foundation, knowledge, and introductory skills necessary to function effectively in professional positions in the field of library and information studies.

1. Students will interpret the role of the information profession and will be aware of its conceptual framework as a basis for their practice in a variety of information environments in a multicultural society
2. Students will demonstrate a 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 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
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 College of Information features Web-based courses that permit graduate students to earn a master's or specialist degree without coming to campus. Additional information about this opportunity is available at: <http://www.ci.fsu.edu>.

Degree Requirements

The master's degree requires thirty-six (36) semester hours of graduate course work. Students take four core courses covering the areas of information organization, policy, research methods, and management. For career planning purposes, courses are offered in three broad areas of concentration: Information Needs and Services, Youth Information Needs and Services, and Information Architecture and Technology. Additionally, students may select courses in one or more areas of specialization (some of which have required courses), or may plan an individualized program of study to best meet their career goals. The current areas of specialization include Leadership and Management, Reference and Instruction, Information Organization, School Media, Youth Services, Technology and Networking, and Web Design. Students may select more than one area of specialization, and additional specializations may become available in the future. Students should plan their course work with the counsel of their academic adviser.

Admission Requirements

Admission to the college is a two-step process involving submission of a Supplemental Application to the college and submission of an application for admission (including all required documents) to a graduate program at the University. Both applications may be obtained online at <http://www.ci.fsu.edu>.

All applicants must meet the University's minimum standards for admission including:

1. Possession of a baccalaureate degree from an approved college/university
2. 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. A TOEFL (Test of English as a Foreign Language) score of 550 or higher on the paper exam, or 213 on the computer exam, or 80 on the Internet exam. The requirement may be waived with documentation of successful completion of at least one academic year of study in a country whose official language is English.

Note: All applicants must submit official GRE scores regardless of GPA.

Meeting the University's minimum required GPA or GRE scores **does not** guarantee admission to the program. Admission is competitive and applicants are evaluated on ALL parts of the application, including the college's Supplemental Application. Applicants must demonstrate academic ability, focus, interest, commitment and other evidence that they can succeed in our graduate program and contribute to the profession. The College of Information gives preference for admission to applicants who meet the minimum University requirements for both the GPA and the GRE.

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 relevant 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

college's standards for admission and acceptance. Students interested in school library media specialist certification should consult the college's Web site (<http://www.ci.fsu.edu>) for requirements. Students seeking certification must do so as part of a master's degree program in information studies.

International Internships

The college offers internship opportunities in conjunction with Florida State University International Programs. Internships are currently available in London and Florence.

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 point 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 (3.0) GPA is not achieved by the end of the next semester of enrollment.

Specialist Degree Program

The specialist degree program addresses the need of 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
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. Students enrolled in the specialist program should consider their individual needs and professional development in the selection of courses either in the College of Information or in other departments. Each specialist candidate who has been accepted is required to plan a program with the major professor during the first semester of enrollment. All specialist students are required to complete a cumulative paper under the guidance of their major professor during the semester(s) prior to graduation. The cumulative paper may be completed for 3 or 6 semester hours over a period of one or two semesters.

For further information, consult the college's Web site: <http://www.ci.fsu.edu>.

Each applicant will be considered individually. Admission will be based, generally, on previous academic performance, individual interest and need, and professional promise. Applicants must submit an Application for Admission to Graduate Study to the University. Minimum admission criteria include evidence of a master's degree with a minimum GPA of 3.2 ; a minimum score of 1000 on the combined verbal/quantitative portions of the GRE; and three letters of reference. In addition, applicants must submit a Supplemental Application to the college. Both applications are available online at <http://www.ci.fsu.edu>.

Specialist Degree Time Frame

The work for the specialist degree must be completed within seven years from the time the student is admitted to the specialist degree program. 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 point 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 (3.0) GPA is not achieved by the end of the next semester in which they enroll.

Juris Doctor/Master of Science Degree

The Juris Doctor/MS joint degree program leads to both a Juris Doctor (JD) Degree from the FSU College of Law and a Master of Science Degree from the College of Information. Graduates of this program will be particularly suited to work in law libraries and other organizations involved with the creation and dissemination of legal information. Students in the joint degree program will receive academic advising from both the College of Law and the College of Information.

Nine (9) semester hours of graduate course work in Information Studies are credited toward the hours normally required for the Juris Doctor Degree, and nine (9) hours of Law courses are credited toward the thirty-six (36) hours required for the MS degree. This saves the joint degree student eighteen (18) semester hours of course work that would otherwise be required to complete both degrees separately.

All course work for both degrees must be completed within a five-year period and both degrees will be awarded at the same time. With the exception of the eighteen (18) special semester hours described above, students are expected to fulfill all requirements for both degrees.

Doctor of Philosophy Program

The doctor of philosophy degree (PhD) is a research degree awarded as the result of independent and comprehensive scholarship in a particular area. The student will become familiar with a wide range of research methods and will develop a background in social science and information theory and phenomena, culminated by completion of an original piece of research. The goal of the Ph.D. program is to produce highly qualified researchers for academic, corporate, nonprofit, or governmental settings.

The objectives of the doctoral program are:

1. To produce highly qualified researchers
2. To prepare graduates with sufficient skills and knowledge to be successful critical scholars, who are familiar with standard techniques of library and information science research, and who are aware of the multiplicity of problems in the information field to which these research techniques may be applied

Each student's program is planned individually in concert with members of his/her Academic Program Committee (APC). Together they must formulate a comprehensive program of study that will ensure a mastery of major and minor areas of interest.

Admission Requirements

Applicants generally will hold a Master's degree (or its equivalent). Applications from prospective students representing a wide range of fields are encouraged due to the interdisciplinary nature of doctoral activity. A student must first meet the minimum requirements for admission to Florida State University Graduate School as stated in the *Graduate Bulletin*.

Admission to the PhD program is highly selective, based upon the assessment of a number of factors which, when taken together, provide evidence that the applicant possesses superior scholastic ability, has the potential for success in a rigorous graduate program of research study, and will perform well within the broad context of information studies. Among the factors considered are the following:

1. Academic records of previous undergraduate, graduate, and professional studies
2. Performance on the general aptitude sections of the GRE
3. Quality and quantity of prior work experience
4. Three or more references provided by the applicants to attest to their experience and their ability to complete advanced study and research successfully
5. A personal statement that gives career objectives and describes the research interests and the specific qualifications of the applicant to pursue doctoral work

AND

6. A recent research paper or writing sample

Additional information concerning application materials is available on the college's Web site at <http://www.ci.fsu.edu>.

Statistics is important for success in the doctoral program; students admitted to the program must complete at least one graduate course or demonstrate equivalent competencies at the beginning of their course work.

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 received by Florida State University by February 1st; applicants for financial aid should submit well before this, preferably by early November. 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 college's Guidelines for Doctoral Students for further information, available on the college's Web site at <http://www.ci.fsu.edu>.

Study for International Students

The College of Information welcomes applications from qualified international students and is pleased to have many distinguished information professionals from other countries among its alumni. The college customarily has international students in residence from a variety of countries. The college 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.

Admission Requirements for International Students

Florida State University requires that all international students meet the following requirements. The student must provide evidence of:

1. A baccalaureate degree (or equivalent) from an approved college or university
 2. Good standing in the institution of higher education last attended
 3. A GPA of at least 3.0 on a 4.0 scale (where A = 4.0) earned 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 a regionally accredited institution, or a minimum score of 1000 on the combined verbal and quantitative portions of the general (aptitude) test of the GRE
- AND**
4. A TOEFL (Test of English as a Foreign Language) score of 550 or higher on the paper exam, or 213 on the computer exam, or 80 on the Internet exam. The requirement may be waived with documentation of successful completion of at least one academic year of study in a country whose official language is English.

Note: All students must submit official GRE scores regardless of GPA.

In addition to these University requirements, international students must meet the specific requirements of the College of Information for the program in which they wish to enroll. The college 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 College of Information and the University's Office of Admissions as soon as possible after deciding to pursue graduate study at FSU in order to obtain full information about requirements for admission.

Financial Aid for International Students

The College of Information does not have scholarships which can be awarded to international students. The college does have a small number of assistantships for which international students may apply.

Certificate Programs

The College of Information offers a variety of certificate programs for people who want to increase their professional knowledge and skills but do not wish to pursue a graduate degree. Certificates are available in these areas of specialization: leadership and management, museum studies, reference services, school library media leadership, Web design, and youth services. Students are required to complete twelve (12) semester hours of course work selected from a list of courses approved for the certificate. Additional information is available through the college's Web site at <http://www.ci.fsu.edu>.

Students will be assigned a faculty adviser upon entering the program and will work with the faculty adviser to develop a plan of study tailored to their professional goals.

Students wishing to enroll in a certificate program must apply to Florida State University as a special student and meet additional requirements of the College of Information. Details about the college's requirements for admission are available at <http://www.ci.fsu.edu>.

Certificate in Leadership and Management

This certificate program is designed to prepare students for leadership and management of information organizations, such as libraries, government agencies, archives, and museums, in the 21st century. Courses will focus on knowledge and skills in the areas of leadership, management, policy, strategy development, decision-making, customer service, team building, negotiating, and budget and finance.

Certificate in Museum Studies

The college participates in the Museum Studies Certificate Program, in conjunction with the College of Arts and Sciences, the College of Visual Arts, Theatre, and Dance, and the College of Human Sciences. The interdisciplinary program combines courses from the College of Information with courses focused on specific museum topics. Additional information about the certificate program is available on the college's Web site at <http://www.ci.fsu.edu> and on the Museum Studies Web site at <http://www.fsu.edu/~ms/>.

Certificate in Reference Services

This certificate program provides training in reference services including searching, selecting and using information resources in a wide range of forms and formats, understanding information needs, and communicating and working effectively with diverse populations.

Certificate in School Library Media Leadership

This certificate focuses on leadership for future or current school library media specialists. It centers on tenets of National Board Certification, which is a voluntary process to recognize and reward organizational leadership established by the National Board for Professional Teaching Standards, a non-profit, non-partisan organization. All courses are designed to increase the knowledge and critical thinking skills associated with organizational leadership. These skills include decision-making, directing others, team building, taking initiative, persuading, presenting, educating, confronting and negotiating.

Certificate in Web Design

This certificate program provides opportunities to build skills in areas of Web design, Web applications, administration, and usability so that certificate holders can enhance their existing knowledge of Web technologies with needed capabilities.

Certificate in Youth Services

The certificate in youth services is intended for people who are working in libraries and who wish to gain additional training in youth services but who do not wish to pursue a graduate degree. Students will gain skills in identifying appropriate information resources for youth, understanding the key developmental stages of youth, developing programs and services for youth, and evaluating resources, programs, and services for youth.



COLLEGE OF LAW

Dean: Donald J. Weidner; **Associate Deans:** Nancy L. Benavides, Donna R. Christie, Jim Rossi, Mark B. Seidenfeld, Stephanie L. Williams; **Director of Law Library:** Faye Jones

The Florida State University College of Law provides a three-year program of study leading to the juris doctor (JD) degree. The JD degree is a requirement for admission to any state bar and is a prerequisite for the practice of law.

The College of Law prepares 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 members 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 college. Over two hundred undergraduate and graduate institutions from all over the world are represented, as are most states. 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.

Three programs of emphasis—Environmental, Natural Resources and Land Use Law; International Law; and Law, Economics and Business—offer students the opportunity to maximize their law degrees through concentrated study. Certificate programs are offered in Environmental and Land Use Law, and International Law. Upon graduation, students receive a certificate along with their JD degrees, indicating that they have achieved special competency in the appropriate concentration area. The programs require students to take three semester hours in addition to those required for the JD degree.

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, with some of the country's most prestigious law firms during the second and third years. Judges and lawmakers frequently speak and 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 context. The College of Law's location provides this context, giving it special advantages.

The college offers one of the most extensive clinical externship programs in the United States. Students earn academic credit while learning to assume the role of attorney or judicial clerk in the litigation and adjudication of real cases. Judicial externships are available with state trial and appellate courts, including the Florida Supreme Court and the federal courts. Externship opportunities with government agencies and commissions, the state attorney, the public defender, and legal services offices are also provided, as well opportunities abroad with the International Bar Association in London. The college is also home to the internationally recognized Children's Advocacy Center, which trains law students in legal advocacy with an emphasis on intensive one-on-one and small group instruction. The Center is unique among law school clinical programs for providing a broad range of legal services. With approximately 80 ongoing cases, it represents children, persons with disabilities, and victims of domestic violence. It also handles special education, Medicaid, foster care, delinquency, criminal, school expulsions, developmental services, and supplemental security income (SSI) cases.

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 ca-

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 454,000 volumes and volume equivalents with more than 164,000 cataloged titles. Continuing subscriptions number more than 4,300. 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 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 College of Social Work, the College of Information, 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, Florida State University, Tallahassee, FL 32306* or at <http://www.law.fsu.edu>.

Summer Program in Law at Oxford

Director: Donna R. Christie

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 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.edu/academic_programs/international_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 (3), 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 on the College of Law's Web site at: http://www.law.fsu.edu/current_students/rules/index.html.

The first-year curriculum is mandatory for all students. First-year students register for fifteen (15) semester hours during the Fall semester and fifteen (15) 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 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. Full-time 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 to the College of Law is a competitive process. Applications are accepted between October 1 and February 15 for admission the following August. The College of Law enrolls only one class in the fall of each year. It does not offer a part-time or evening program. Applicants are encouraged to submit and complete law school applications as early as possible, preferably by December 1. Files must be complete by April 1 to receive full consideration.

Admission decisions are based upon evaluation of each applicant's potential for success in law school and in the legal profession and the extent to which the applicant's background offers a unique contribution to a diverse educational environment in the College of Law. To this end, the Admissions Committee has authority over all matters pertaining to admissions.

Admission to the College of Law is a competitive process and applications with the strongest records are given priority. A majority of admissions decisions are made primarily on the basis of combining LSAT scores with undergraduate grades. In addition, the personal statement, resume, recommendation letters and strength of undergraduate program are reviewed for all applicants.

The Committee takes into consideration such factors as exceptional personal talents, interesting or demanding work or service experience, rigorousness of undergraduate course of study, leadership potential, graduate study, maturity, ability to communicate effectively, and other factors. In addition, the Committee considers obstacles or accomplishments that indicate a greater chance of success in law school than might be indicated by performance in college or on the LSAT, including but not limited to: economic need requiring significant employment during college, social and cultural disadvantages, linguistic barriers and extraordinary family or personal responsibilities.

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 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, Florida State University, College of Law, Tallahassee, FL 32306-1601; (850) 644-3787* or at <http://www.law.fsu.edu>.

Financial Aid

There is no separate financial aid office in the College of Law. All financial aid inquiries can be directed to the Florida State University Office of Financial Aid at <http://www.fnaid.fsu.edu/>. For additional information, see the Financial Aid section of this *Graduate Bulletin*.

Student Services

The associate 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; **Senior Associate Dean for Academic Affairs:** Alma Littles; **Associate Dean for Health Affairs:** Robert Brooks; **Associate Dean for Research and Graduate Programs:** Myra M. Hurt; **Associate Dean for Student Affairs:** A. Peter Eveland; **Associate Dean for Educational Development:** Sebastian Alston; **Associate Dean for Curriculum and Evaluation:** David Steele; **Assistant Dean for Faculty Development:** Dennis Baker; **Assistant Dean for Diversity and Outreach:** Eugene Trowers; **Assistant Deans for the Regional Medical School Campuses:** Michael Muszynski, Orlando Campus; Paul McLeod, Pensacola Campus; Bruce Berg, Sarasota Campus; Mel Hartsfield, Tallahassee Campus; **Director of the Clinical Learning Center:** Sarah Sherraden; **Director of the Medical Library:** Barbara Shearer

The Florida State University College of Medicine is fully accredited by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association to provide a four-year program of study leading to the medical degree (MD). The MD degree is a requirement for admission to medical residency programs and is a prerequisite for taking the United States Medical Licensing Examination (USMLE) Step 3, and a prerequisite for licensure for the practice of medicine in the United States. Steps 1 and 2 of the USMLE are taken during medical school.

The mission of the College of Medicine is to educate and develop exemplary physicians who practice patient-centered health care, discover and advance knowledge, and are responsive to community needs, especially through service to elder, rural, minority, and underserved populations. The third and fourth year curriculum is primarily in ambulatory settings and focuses on preparing students to deliver primary care for Florida's underserved senior, rural, minority and inner-city populations. However, the Florida State University College of Medicine student selection process and the comprehensive physician training program do not exclude students interested in specialty medicine, as specialty training is a required part of the curriculum.

The Florida State University College of Medicine (FSUCOM) was created in June 2000 by a legislative act, Florida House Bill 1121/Senate Bill 1692, to serve the unique needs of the citizens of the state of Florida. The Program in Medical Sciences (PIMS), founded in 1971 as an expansion program of the University of Florida College of Medicine, is the foundation upon which the Florida State University medical school is built.

The first two years of medical school, the basic sciences and early clinical exposure are taught at Florida State University and housed in the new College of Medicine Building. Years three and four are community-based and focus on clinical training. The community-based model ensures that students receive training in a variety of practice settings including rural and inner-city hospitals, nursing homes, residency programs, clinics and doctors' offices. Clinical training sites are located in Tallahassee, Pensacola, Orlando, Sarasota, Daytona Beach, Ft. Pierce, several Family Medicine Residency Programs and several rural communities. Students are connected to the College of Medicine and the respective regional campuses through Internet access, videoconferencing and hand-held data units. Through these units, students can access medical information, communicate with the College of Medicine main campus, and record and evaluate their clerkship and preceptorship experiences.

The John D. Thrasher Building at the College of Medicine houses the educational program. It serves as the hub for the extensive electronic network connecting all faculty and students at several locations throughout Florida. Basic medical science and clinical training courses that utilize state-of-the-art technology and nationally recognized academicians and clinicians at the Florida State University College of Medicine and at clinical sites elsewhere in Florida have been established.

The Medical Library

The Florida State University College of Medicine has developed a 21st century library which is accessible to all faculty and students. The Charlotte Edwards Maguire Medical Library is the first academic medical library created since the development of the Internet. The medi-

cal library is located in the John D. Thrasher Building at the College of Medicine. The library provides the most up-to-date, online resources for medical research and reference and houses current journals and books. The library maintains instructional support systems that utilize the latest technology and contain information appropriate to basic science and clinical studies. The library also holds 650 shelf copies and provides access to a number of paper and online journals. The medical library also contains taped 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 Florida State University.

The Clinical Learning Center

The Clinical Learning Center, located in the John D. Thrasher Building at the College of Medicine, is a state-of-the-art teaching and assessment center that provides opportunities for medical students to learn clinical skills in a simulated clinical setting. Students learn and practice hands-on clinical skills in a supportive environment that incorporates the latest and best innovations in interactive medical technology and education. Fourteen examination rooms and two consultation rooms are equipped with audio-visual resources to record student-patient interactions for teaching and evaluation. Using standardized patients trained to portray an actual patient by simulating an illness or other physical findings, the Clinical Learning Center provides support for faculty in small group sessions to help teach students communication and physical exam skills.

Degree Requirements

Doctor of Medicine (MD) Degree

The four-year curriculum consists of courses in the biomedical sciences, medical humanities and social sciences; a doctoring curriculum that teaches clinical skills, preceptorships, community-based health care experiences, and clerkships in applied clinical medicine.

The pre-clerkship course work (years 1 and 2) takes place on the Florida State University main campus and is designed to provide students with essential basic science and general clinical information necessary for their clinical training in years 3 and 4. Students study a core curriculum to help develop an understanding of the structure and function of the human system. The structure and function of the healthy human is studied in the first year. During the second year, emphasis is placed on microbiology, pathology, pharmacology, and general therapeutic principles for the "sick" human. The basic science and clinical instructors use a combination of small group and lecture-based instruction.

The third and fourth years are devoted to required and elective clinical clerkship rotations of 2-8 weeks, most of which take place at one of the College of Medicine Regional Medical School campuses. Hospitals, physicians' offices, neighborhood clinics, residency programs, and public health units are used as training sites in which students actively participate in the clinical setting. Up to 24 weeks (minimum 12 weeks) in the fourth year are devoted to student electives in which students are able to choose among select rotations including subspecialty rotations. Twelve weeks must be spent in FSUCOM sponsored electives at any of the College of Medicine sites. The remaining 12 weeks can be spent in an elective study at any accredited medical school or approved clinical setting in the United States. In select cases, consideration may be given to limited international electives with prior approval.

The FSU College of Medicine trains students in allopathic medicine, which includes diagnosing, managing and treating disease. The college confers upon its graduates the degree of Doctor of Medicine (MD). Upon completion of the four-year MD educational program, these physicians pursue graduate medical education (internship, residency, and sometimes fellowships), which is necessary for eventual licensure. Training in residency programs may take from three to nine additional years after completion of medical school.

To earn the MD degree a student must complete all required course work and clerkships in years 1-4, including a minimum of 12 weeks of electives in Year 4; complete all required surveys and evaluations; pass the USMLE Step 1, Step 2 CK and Step 2 CS; pass an OSCE (Objective Structured Clinical Examination) at the end of the third year clerkship rotations (graduation OSCE); complete all requirements in the procedures log; remain in good standing and maintain a 2.50 overall GPA. Further information may be found in the online College of Medicine Student Handbook at <http://www.med.fsu.edu/pdf/StudentHandbook.pdf>.

As part of the academic and clinical curriculum, the College of Medicine emphasizes the importance of the professional and ethical development of all medical students. The College of Medicine expects professional behavior of physicians in training 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 and science of medicine.

Honors Medical Scholars Program

The FSU College of Medicine joined forces with the FSU Honors Office to establish a BS/MD program that is open to up to five students annually. The program allows eligible FSU honors students to pursue a BS degree of their choice while also participating in the Medical Scholars Program, which includes a seminar, mentorship program and required pre-medical courses and experiences. Students participating in the program are eligible for early admission to the FSU College of Medicine upon completion of pre-med requirements, making it possible to graduate with BS and MD degrees in seven years. Applications and program details are available from the FSU Honors Office, (850) 644-1841.

PhD in Biomedical Sciences Program

The PhD in Biomedical Sciences Program is designed to prepare the next generation of health scientists for medical research and teaching in an era of increasing coordination and integration of traditional disciplines. The College of Medicine grants the PhD in Biomedical Sciences through an interdisciplinary program with the goal of training students to conduct research in the broad area of the molecular basis of human disease, including the function of the human genome in development, neurobiology, aging, cancer, and other disease. Undergraduate majors in biology, biochemistry, chemistry, microbiology, or other life sciences are suitable for graduate studies in biomedical sciences.

The curriculum for the Biomedical Sciences degree includes core courses in statistics and ethics in research, as well as specialized biomedical course work and laboratory research. Laboratory rotation in at least three laboratories during the first year is a degree requirement. The direction and supervision of graduate work at the doctoral level resides primarily with the major professor and supervisory committee, which is comprised of 4 faculty members. Research rotations during the first year allow students to make informed choices regarding the research area and major professor with whom they will conduct their PhD work. A core curriculum of the fundamentals, the choice of electives from other departments and intellectual interaction with faculty and postdoctoral fellows encourage graduate students to mature into independent scientists.

To be considered for graduation from the FSUCOM with the PhD degree in Biomedical Sciences, the student must successfully complete all course requirements within five calendar years from the time the student gains admittance to candidacy by passing the preliminary exam. Other requirements for graduation include attending the Health Science Seminar Series, teaching at least two semesters, successfully completing the preliminary doctoral examination, submitting a doctoral research proposal approved by the major professor and the supervisory committee after admission to doctoral candidacy, registering for a minimum of twenty-four (24) semester hours of dissertation credit, and submitting, publicly presenting and successfully defending a dissertation.

Additional details are available at <http://www.med.fsu.edu/biomed/phd/default.asp>.

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 online at <http://www.med.fsu.edu/pdf/StudentHandbook.pdf>. All basic science courses and clerkships so noted are mandatory for all students.

The four-year Florida State University College of Medicine is a full-time allopathic medical school in accordance with the standards set by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association. The minimum credit hour load requirement for each cohort is designed to ensure that medical students will complete their medical studies within a four-year period of time. The first year is a twelve-month curriculum. The second year is nine months. The third and fourth years are eleven months each.

Authorization for less than the full-time status will be granted by the Dean of the College of Medicine upon the recommendation of the Student Evaluation and Promotion Committee (SEPC) and the Associate Dean for Student Affairs. A recommendation of an extension of attendance time by the SEPC will be based on a compelling need as presented by the student.

Admission Requirements

MD Program

Admission to the College of Medicine is a highly competitive process with between 1500 and 2000 applications reviewed to select the students admitted. A number of academic and personal factors are considered by the admissions office and the College of Medicine selection committee when admitting students to medical school.

The unique characteristics of medical education in the College of Medicine include clinical experiences beginning in the first year of medical school, the need for students with a high likelihood of choosing a career in primary health care, community-based clinical rotations in the third and fourth year in one of several community campuses in Florida, and a student-oriented learning environment that values teamwork and the doctor/patient relationship. The College of Medicine is searching for students who have demonstrated through their lifestyle a commitment of service to others and encourages applications from traditional students, nontraditional students, and students from rural, inner city or other medically underserved areas of the state of Florida.

To apply to the College of Medicine at Florida State University, an applicant should apply through the American Medical College Application Service (AMCAS) and should have taken the Medical College Admission Test (MCAT). To receive the FSUCOM formal secondary application, an applicant should be a legal resident of Florida, should meet academic standards predictive of success in medical school (academic grade point average and MCAT score), and should have completed the required prerequisite courses (a listing of pre-requisite courses may be obtained by contacting the Pre-Health Professions Advising Office in the College of Medicine or on the College of Medicine Web site at http://med.fsu.edu/curr_advising.asp). An applicant's MCAT score should be dated no more than four years prior to the beginning of the year of the application cycle. A bachelor's degree is required by the time of admission to medical school. If an applicant is currently enrolled in a degree program, the program must be completed and transcripts provided to the College of Medicine admissions office prior to the beginning of classes in late May.

PhD in Biomedical Sciences Program

To apply for the PhD in Biomedical Sciences Program, students should contact the College of Medicine's Office of Research and Graduate Programs at (850) 644-2015 or check the program Web site (<http://med.fsu.edu/biomed/phd/contact.asp>) for other contact information. Admission requirements for the PhD in Biomedical Sciences Program are as follows: a prospective candidate must 1) have or be a candidate for a Baccalaureate degree from an accredited college or university and be in good standing at the last institution attended, 2) have a minimum GPA of 3.0 (on a 4.0 scale), and 3) have a minimum com-

bined verbal and quantitative score of 1000 on the Graduate Records Examination (GRE). A GRE Subject Test is strongly recommended and may include Biochemistry and Cell Biology, General Biology, Chemistry, or Physics. Applicants whose native language is not English, and who have not received a degree from an English language institution are required to take the Test of English as a Foreign Language

(TOEFL), receiving a minimum score of 600 for the paper test or 233 for the Computer Based Test (CBT). Special admission consideration may be requested for students with disabilities.

Applicants must also submit the required material to the University Admission Office through their Web site at <https://admissions.fsu.edu/gradapp/>.





COLLEGE OF MOTION PICTURE, TELEVISION, AND RECORDING ARTS

Dean: Frank Patterson

Established in 1989, the College 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. Both programs are served by a completely equipped production center. The Film School funds all student film and video workshops and productions, including the graduate and undergraduate thesis film productions.

The expertise of the Film School's faculty reflects the direction and range the school will take in the future. Frank Patterson, Dean of the College 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 18 faculty members, all of whom are specialists in the areas of writing, directing, cinematography, production design, visual effects, 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 filmmakers with various specializations as writers, directors, producers, cinematographers, audio designers, production designers, and editors in both the theatrical and non-theatrical film and television industries, many of whom have won national and international awards and honors for their work. Some of these also have a strong record as research scholars and as writers of fiction. The faculty also includes visiting professors from the field of motion picture law, business, distribution, exhibition and promotion.

Facilities

The Film School operates extensive production facilities for its graduate and undergraduate programs in the University Center "A" Building on the Florida State University campus in Tallahassee. Considered one of the finest facilities in the world devoted exclusively to film education, it includes two sound stages, a recording stage with Foley and ADR capabilities, a 120-seat screening theatre and three smaller screening rooms, three digital audio mixing suites, a computer laboratory, a set-building shop, a 35mm archive of feature films, a 5,000 title collection of films on videotape, DVD, and laserdisc, a large production research library, and digital editing suites for picture and sound. 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 craftspeople in the professional film and video production industries. The MFA program is a full-time (fall, spring, and summer), two-year course of study in motion picture screenwriting and production. Writing students will complete sixty-three (63) semester hours, and production students will complete ninety (90) semester hours of course work. The curriculum focuses on the art, craft, and business of storytelling. The graduate program is designed and scheduled as a conservatory. It is meant to create a practicum setting in which individuals can work with accomplished professionals to hone their talents, develop a body of work, and sharpen their capacities to work in teams.

Admission to the Graduate Program

Admission to the College of Motion Picture, Television, and Recording Arts graduate program is of limited access, with 24 production and 6 writing students admitted each year, making admission selective and competitive. Prospective students must make application to and meet the requirements of the Florida State University Graduate Admissions Office, and also must submit a separate application directly to the graduate program at The 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, production applicants may submit a sample of their best work (video, writing sample, etc.). Writing applicants must submit samples as specified on the application. Applications are available online at <http://film.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 College 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 Web site at <http://www.fnaid.fsu.edu>.



COLLEGE OF MUSIC

Dean: Don Gibson; **Assistant Deans:** Seth Beckman, William Frederickson, Leo Welch

The graduate program of the College of Music is one of the largest and most comprehensive in the country. Accredited by the National Association of Schools of Music since 1930, it has a long and illustrious history of graduating outstanding performers, composers, scholars, administrators, educators, and therapists.

Degree Programs Offered

The following degrees are offered through the College of Music: the master of music 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 College of Music. All students working toward master's and doctoral degrees in music register directly in the College of Music.

Certificate Programs

In addition to its degree programs, the College of Music offers a number of certificate programs that provide an additional specialized area of emphasis for graduate students. These include certificate programs in church music, jazz studies, piano pedagogy, early music, music of the Americas, world music, piano technology, pedagogy of music theory, special music education, harpsichord performance, college teaching, music education and leadership, arts administration, and organ performance. A post-master'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 College of Music enjoys excellent teaching, research, and performance facilities. The two College of Music buildings are located on Copeland Street on the east side of the campus. The Kuersteiner Building, completed in 1948 and recently renovated, is a four-story structure connected to the Wiley L. Housewright Music Building, which was completed in spring 1979. The College of Music also occupies a number of offices in the Longmire Building. These buildings house the administrative offices; teaching studios; classrooms; band, orchestra, choral, opera, and ensemble rehearsal halls; music education and music therapy research laboratories; electronic music studios; ethnomusicology studios; early music studios; concert and recital halls; the **Warren D. Allen Music Library**; the **Center for Music Research**; and 130 practice rooms. All music facilities are air-conditioned and are structurally designed for maximum effectiveness.

Concert Facilities

The **Opperman Music Hall** is a 430-seat recital hall located in the Kuersteiner Building. The facility is used for faculty and student recitals, concerts, and lectures. The **Ernst von Dohnanyi Recital Hall**, located in the Housewright Music Building, is a 218-seat recital and lecture facility, while the 125-seat **Lindsay Recital Hall**, located in the Kuersteiner Building, is also used for recitals and lectures. 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 College of Music, as well as many users from other areas of the University. One of the major music libraries of the southeastern United States, the library provides a pleasant setting conducive to the efficient utilization of the extensive collection of over 145,000 scores, sound recordings, video cassettes, books, periodicals, and microforms. Housed in 18,000 square feet of space with comfortable furnishings and excellent sound equipment, the music library provides students with impressive resources and surroundings for the pursuit of their studies. A librarian and other library staff are on duty to assist students and faculty in their use of the library.

Opera Shops

Built in 1977–78, the **Opera Scene Shop** provides 6,000 square feet of construction space with some storage area. The building features a drafting office, elevated grid area for constructing wagons and assembling scenic flats or drops, complete hand and table tools, and a wooden "stage" area for painting drops. An opera production is built there each semester, as well as sets for opera scenes and opera majors' projects.

The **Opera Costume Shop** is located in the 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 College 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 University-wide admission requirements; and 2) meet College 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 non-music 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 non-music 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 non-music electives (continuous 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 non-music 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 non-music 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 non-music 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 non-music 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 non-theory electives. Reading proficiency in German must be demonstrated by examination. The degree will be awarded upon completion of a written and oral comprehensive examination and defense of thesis.

Master of Music 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 non-music electives (suggested courses include theatre, dance, art, arts administration, business, or languages); and three (3) semester hours in an opera directing project.

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 rehabilitative 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 non-music subject area.

A candidate for the master of music education degree, with the approval of the graduate music education committee, may elect a non-thesis plan which requires a minimum of thirty-six (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 1) two years of experience beyond the master's degree as a certified/registered music therapist, and 2) a diagnostic examination assessing the applicant's ability for advanced work in the field.

Music 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: 1) a recognized bachelor of music degree or its equivalent, including two years of a foreign language; 2) the graduate music classification examination in music theory, music history, and applied music; and 3) a diagnostic examination which will further assess the applicant's qualifications for advanced work in the field.

A minimum of seventy (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 non-music 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 (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, and one lecture recital/project. Opera emphasis students should consult with their major professor regarding the treatise or non-treatise track. For voice performance majors with a pedagogy emphasis, the requirements are one public recital, one lecture recital, one chamber works recital, an extended research treatise on a subject related to pedagogy, advanced foreign language study, and an expanded comprehensive examination which includes voice teaching. For piano performance majors with an accompanying/chamber music emphasis, the requirements are two vocal accompanying recitals, two instrumental chamber music recitals, lecture recital, and the research treatise.
2. The preliminary examination is administered under University-wide regulations, except it is not mandatory to complete this examination six months prior to graduation.
3. The dissertation requirement is satisfied by registration for the recitals and the research treatise. The examination in defense of dissertation is satisfied by the examinations administered prior to recitals and by the defense of research treatise.

COLLEGE OF NURSING

Dean: Lisa Plowfield

Florida State University's 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 Commission on Collegiate Nursing Education.

Master of Nursing—Programs of Study

The following programs of study are offered:

Family **nurse practitioner**, nurse educator, and clinical specialist case manager. The **post master's programs** offer focused studies in nurse practitioner, case manager, and nurse educator roles.

Facilities

Academic Resources. The College of Nursing has varied and abundant resources to support graduate study. The **Learning Resource Center (LRC)** on the third floor of the college 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, which allows nursing practice in specialized areas with advanced practice. Graduates in the role area of family nurse practitioner 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, and 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 College of Nursing or the University financial aid office.

Federal nurse traineeships are awarded by the graduate committee of the College of Nursing for full-time study. The graduate committee also awards the University graduate teaching or research assistantship funds allocated to the college 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 or Commission on Collegiate Nursing Education

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 and unencumbered licensure as a registered nurse in Florida
5. CPR Certification
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 challenge 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 College of Nursing before admission. Applicants will be provided with fingerprint cards and waiver forms at the time they apply to the College of Nursing. The cost of the background check is approximately \$50.00 and must be paid by the student.

Statement of Professional Conduct

While enrolled in the College of Nursing graduate program, the student is expected to demonstrate conduct and behavior which conforms with the Nurse Practice Act of the State of Florida, the Florida State University Student Conduct Code, Workplace Violence Guidelines, the Academic Honor Code and all other applicable rules and policies of the University. The College of Nursing reserves the right to refuse or discontinue the enrollment of any student whose conduct or behavior is so negative, disruptive, or destructive as to compromise the work of fellow students, the effectiveness of the faculty, and/or the ability to work positively in a collaborative environment consistent with the aforementioned policies and guidelines.

Faculty members continually assess each student's professional performance. All College of Nursing graduate students are evaluated formally at the end of each semester. Any student who, in the opinion of the faculty, fails to maintain appropriate standards, will be placed on probation or dismissed from the program after receiving written notification.

Academic Performance/Academic Honor Code

College of Nursing graduate students are expected to make satisfactory academic progress consistent with the University's minimum retention standards for graduate studies. Student and faculty responsibilities for maintaining academic honesty and integrity are outlined in the Florida State University Academic Honor Code and Student Conduct Code. The College of Nursing graduate program reserves the right to refuse or discontinue the enrollment of any student who fails to maintain the academic integrity of the program as described in these codes.

Academic Requirements

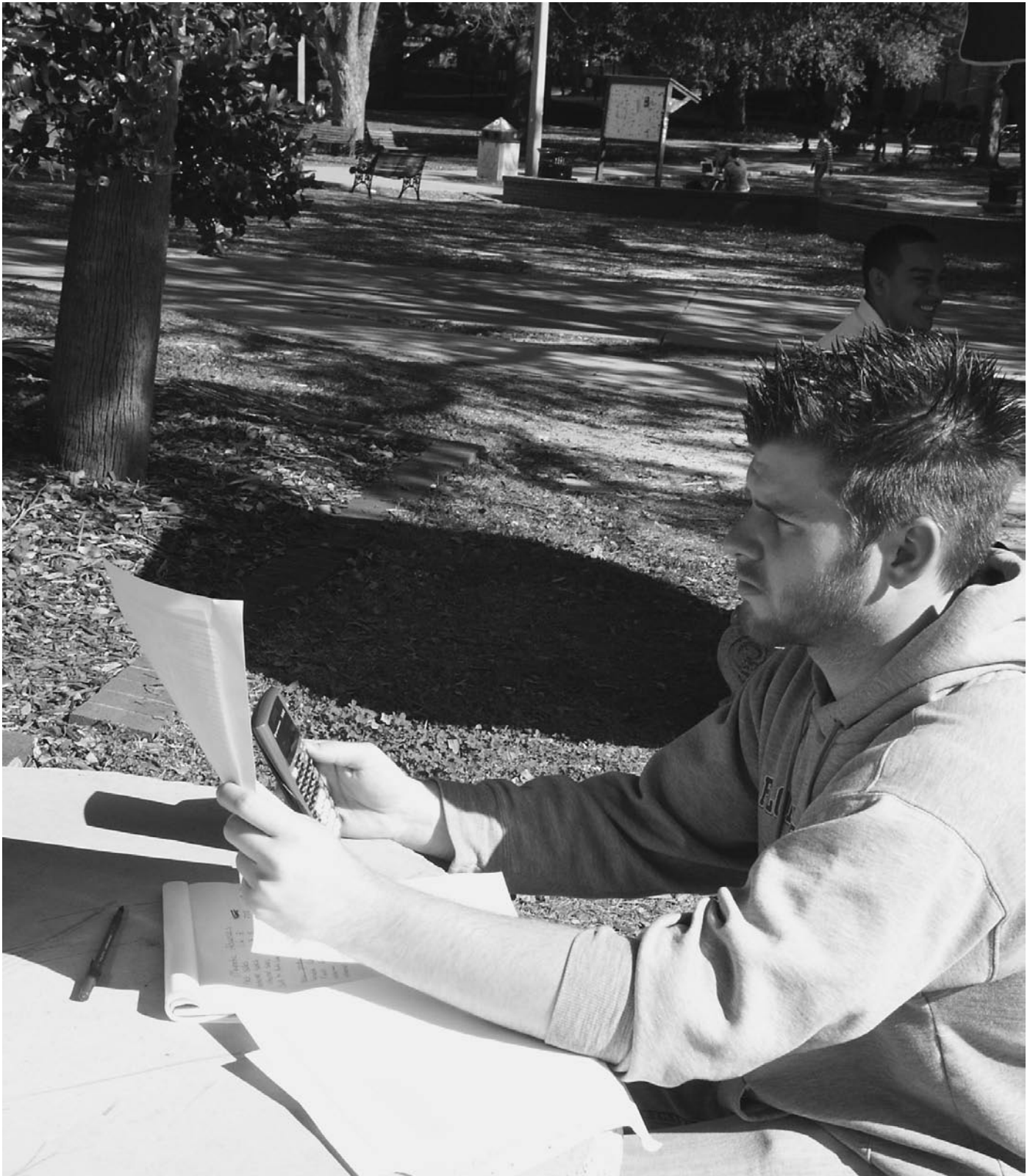
No clinical course for which a student receives a grade of "B-" (2.75 quality points) or below may count toward any graduate degree in the College of Nursing.

Students in the graduate program are required to maintain a 3.0 grade point average in all nursing 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 College of Nursing graduate program after having been dismissed for academic reasons the student is required to do the following:

1. Submit a written request for consideration of reinstatement to the graduate program director
2. As part of the reinstatement process the student will be expected to meet with the College of Nursing admissions committee to provide justification for a reinstatement decision.
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, and University Distinguished Research Professor. Its faculty also includes numerous University teaching and advising award winners and presidents of such national bodies as The American Sociological Association, The American Society for Public Administration, the Public Choice Society, The Association of Private Enterprise Education, and The Association of Collegiate Schools of Planning. Several have won prizes in their fields both for research and service.

The College of Social Sciences focuses upon both basic knowledge and the application of that knowledge to policy questions and public affairs. In applied policy, the college's interests center on regional, national, and international affairs, and it has a particular interest in state issues, befitting the University's location in Florida's state capital.

The college consists of the Reubin O' D. Askew School of Public Administration and Policy; the departments of Economics, Geography, Political Science, Sociology, and Urban and Regional Planning; the Pepper Institute on Aging and Public Policy; the Center for Demography and Population Health; the DeVoe L. Moore and Family Center for the Study of Critical Issues in Economic Policy and Government; the Leroy Collins Institute on Public Policy; the Florida Public Affairs Center; the Gus A. Stavros Center for the Advancement of Free Enterprise and Economic Education; and interdisciplinary programs in Aging Studies, Asian Studies, African-American Studies, Environmental Studies, Social Sciences, International Affairs, Law and Society, Russian and East-European Studies.

The college offers programs leading to the master's degree in 13 fields, the doctor of philosophy degree in six fields, and six graduate certificates.

Master's Programs

Aging studies
Asian studies
Demography
Economics
Geography
Geographic Information Sciences
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

Joint-degree programs

Joint-degree programs, requiring fewer total hours than the two degrees would separately, are offered as follows:

Master of public administration (MPA) and master of science in planning (MSP)
Master of science (MS) in economics and juris doctor (JD) in law
Master of arts/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 arts/master of science (MA/MS) in international affairs and master of science in planning (MSP)

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
Real Estate Development
Urban Design

The graduate programs in the college produce competent and up-to-date professionals for employment in the public and private sectors, as well as non-profit organizations. The college's doctoral programs prepare students for entry-level faculty positions in colleges and universities. Doctoral students in most departments of the college have opportunities for employment as teaching assistants during their programs of study.

The college offers one health-focused interdisciplinary master's degree: the Master of Public Health (MPH).

MPH degree graduates will be trained principally as health administrators and health policy analysts. They will have a rich background in epidemiology, health economics, health behavior, health administration, health policy and policy analysis, and statistical and qualitative analytic skills. Careers are likely to include government agency or legislative staff positions, policy and consulting firms, think tanks, advocacy organizations and lobbying firms, international organizations focused on health and population issues, academic or media positions.

For additional information see the "Interdisciplinary Program in Public Health" chapter in this *Graduate Bulletin*.

Requirements

Master's Degree

The college's minimum requirements for master's degrees are the same as the University's (see the "Graduate Degree Requirements" chapter of this *Graduate Bulletin*). However, 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 joint-degree programs normally requires formal admission to both programs before registration for either. Refer to the individual program or department entries in this *Graduate Bulletin* for details.

Doctoral Programs

In conformity with University regulations, it is the normal expectation of the College of Social Sciences that the doctoral dissertation will require at least two semesters of full-time effort to prepare. Graduate students registering for dissertation hours only are normally expected to register for twelve (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 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, and Urban and Regional Planning.

Assistantships and Fellowships

Most of the college's departments have large undergraduate teaching programs, and the departments, institutes, centers, and programs engage in substantial outside-funded research and contract work. Accordingly, many graduate students are appointed as teaching or research assistants. Appointments to assistantships are competitive; therefore, applicants should inquire of their department or program as early as possible in the calendar year for fall appointments. Students on assistantships normally are encouraged to register for twelve (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 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. Departments also have PCs and software available for use by their graduate students. The Center for Demography and Population Health has a specialist library.

Graduate students on assistantships are normally provided with office space to carry out their duties, including meetings with students if they are teaching. The college participates in joint-degree programs with the College of Law, in which students can simultaneously pursue the JD degree and either the MPA, the MSP, the MS in economics, or the MA or MS in international affairs. The Reubin O'D. Askew School of Public Administration and Policy has joint-degree programs with the Department of Urban and Regional Planning, the College of Criminology and Criminal Justice, the College 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. The Department of Urban and Regional Planning has joint-degree programs with the College of Law, the Askew School of Public Administration and Policy, and the master's program in International Affairs, in which the student can simultaneously pursue the MSP and JD degree, MSP and MPA, or MSP and MA or MS in international affairs. These programs enable the student to complete both degrees in less time than if they were attempted sequentially. To enter a joint-degree program, the student must be formally admitted to both programs.

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 members 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.

COLLEGE OF SOCIAL WORK

Dean: C. Aaron McNeece; **Associate Dean:** Scott Ryan; **Assistant Dean:** Pamela W. Graham

The College of Social Work has a long standing tradition of excellence. Dr. Raymond F. Bellamy, professor of sociology from 1918 to 1956, first introduced social welfare content into the curriculum in 1926. Dr. Coyle Moore later became the first Dean of the School of Social Welfare which was established in 1949. By the mid 1930s, during the Great Depression, undergraduate courses in casework and group work were offered, as well as internships at the Leon County Welfare Association and the Leon County Unemployment Relief Council.

In June 1973 the social work program became identified as the School of Social Work and in 1997 moved to wonderful new facilities at the University Center. In 2005 we were pleased to receive the designation of College of Social Work, offering social work degrees at the baccalaureate, master, and doctoral levels. The Council on Social Work Education (CSWE) initially accredited the M.S.W. degree program in 1950. The baccalaureate program was among the first of such programs accredited by CSWE in 1974. The Ph.D. program in social work was approved by the Florida Board of Regents in 1974 and accepted its first student in fall of that year. There are presently approximately 350 undergraduates and 400 graduate students enrolled in the College, with 40 faculty members. More than 40 students are engaged in active study for the Ph.D. in social work.

Administratively, the College is directed by a Dean, assisted by an Associate and an Assistant Dean. Other administrative faculty is responsible for the doctoral program, the BSW program, distance learning programs, and field education. The faculty oversees committees addressing most areas of College functioning, with student representatives on each of these committees.

U.S. World and News Report ranks Florida State University's College of Social Work amongst the top Colleges of Social Work in the country and the only such ranked College in the state of Florida. We are dedicated to the preparation of the outstanding social workers of tomorrow. The College offers an up-to-date, rigorous, academic curriculum and carefully selected internships that provide students with the opportunity to put into action the conceptual and practice aspects of social work.

Master of Social Work 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.

Goals of the Master's Program in Social Work

The MSW program, nationally accredited by the Council on Social Work Education (CSWE), offers a broad professional education based on a systems perspective, which stresses how individuals live in their environment and how the environment affects them.

The goal of the master's program in social work at Florida State University is to provide quality preparation for advanced practitioners who will work with diverse client systems and problems. We emphasize empirically-based practice which focuses on preventing problems as well as treating them. Our curriculum is flexible so students may shape their own program to meet individual interests. Toward this end, the MSW program will prepare students to:

- Understand the history of social welfare and the social work profession and who can practice within the values and ethics of the social work profession
- Apply the knowledge and skills of a generalist social work perspective to empirically-based practice
- Have an understanding of and respect for diversity and work toward social and economic justice
- Practice without discrimination and with respect, knowledge, and skills related to clients' age, class, color, culture, disability, ethnicity, family structure, gender, marital status, national origin, race, religion, sex, and sexual orientation

- Be aware of their responsibility to continue their professional growth and development, using supervision and consultation appropriate to social work practice
- Critically analyze the impact of social policies on client systems, workers, agencies, communities, and nations, and seek changes in social policies and practices
- Critically evaluate and apply research findings to practice and further evaluate their own practices and disseminate findings
- Apply the knowledge and skills of advanced empirically-based social work practice in an area of concentration

Further goals of the master's program are to:

- Remain vital and progressive by actively pursuing ongoing relationships and exchanges with social work practitioners; groups that develop, implement, and benefit from social policies and services; professional associations; and disciplines and departments in the academic community
- Assume responsibility for systematic and high quality scholarship that evaluates social work practice and develops and advances knowledge
- Provide service to the people of the state of Florida

Educational Policy and Accreditation Standards (EPAS)

The College of Social Work adheres to accreditation standards established by the Council on Social Work Education. These standards are referred to as EPAS and were voted and put into effect July 1, 2002 (replaces 1994 CPS). For further details, refer to: http://www.cswe.org/accreditation/EPAS/EPAS_start.htm.

College of Social Work Mission Statement

It is the mission of the Florida State University College of Social Work to provide quality educational services at the baccalaureate, master's, and doctoral levels that prepare social workers to enhance human well-being and help meet the basic needs of diverse populations with particular attention to the empowerment of people who are vulnerable, oppressed, and/or living in poverty. The College of Social Work also has as its purpose to contribute to the knowledge base that supports evidenced-based social work practice and social policy development and to provide community service at the local, state, and national levels.

Master's Program Requirements

The requirements for the traditional master of social work degree are normally completed in two years (four semesters) beginning in August of one year and ending in May of the last year. Students are expected to enroll as full-time students each of the four semesters. The degree is awarded upon completion of a minimum of sixty-one (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 college offers an advanced standing program for graduates of an undergraduate social work program accredited by the Council on Social Work Education who have a grade point average (GPA) of 3.0, and who meet certain other course, field practice, and related work/volunteer experience requirements.

The advanced standing program is normally completed in three semesters. This program consists of a minimum of thirty-nine (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.

Part-Time/Off-Campus/Online 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, and Panama City as well as online. 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 June 1st of the year in which admission is planned and must be made both through the graduate student affairs office in the College of Social Work and through graduate admissions at 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).

University requirements for admissions must also be met. A limited number of exceptions to these requirements are available. For further information and application materials, contact the coordinator of recruitment and admission at: <http://csw.fsu.edu>.

Transfer Students

A limited number of students who have completed a full year of graduate study in an accredited College of Social Work may be admitted to the second year of graduate study. Applications should be completed before June 1st of the year in which admission is requested. Work completed more than four years before the date of admission cannot be credited toward the master of social work degree.

Grade Requirements

The College of Social Work expects graduate students to maintain a "B" average in each semester of classroom work and a grade of "S" in each field education course. Continuation in the program with less than a 3.0 GPA will require the approval of the Dean of the College of Social Work. Students may not be in a field placement with an "I" or "NG" on their graduate record.

Doctoral Program

The mission of the Doctoral Program is to develop social work scholars and leaders in research and education who use systematic methods of inquiry and reasoned argument to advance knowledge. Specific goals of the program are:

1. To offer courses and opportunities for experiential learning in systematic methods of inquiry that is sequentially integrated and foster independent capabilities
2. To offer courses and opportunities for experiential learning in adult pedagogy that is sequentially integrated and foster independent capabilities

Admission

Admission to the doctoral program as a full- or part-time student requires graduation from the master's degree program of a College of Social Work accredited by the Council on Social Work Education, plus a score on the GRE of at least 1050 with a verbal score of at least 500 and a quantitative score of at least 550, and 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 college policy for such exceptions.) This requirement will ensure that applicants come with an experiential base of practice upon which

they can draw during the period of doctoral study. All applicants will be considered on an individual basis. An interview may be requested. Students 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, College of Social Work, 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

The College of Social Work offers other unique opportunities that afford you the ability to focus on specialized areas of interest. With the guidance of faculty and our graduate adviser, you create a program of study, which meets your specific educational and career goals. For more information and certificate applications, visit the College's Web site at: <http://csw.fsu.edu>

Child Welfare Practice Certificate Program

This certificate program offers both undergraduate and graduate students an opportunity to focus their curriculum on issues related to child welfare. Course work addresses: the prevention of neglect, abuse, exploitation, or delinquency of children; the protection of homeless, dependent, or maltreated children; the strengthening of families to maintain children in their own homes; the development of advocacy groups, and analysis of social policies and mental health issues related to this population. Child welfare practitioners provide a continuum of services in both public and private settings. For further information, visit <http://csw.fsu.edu/childwelfare>.

Family Social Work Practice Certificate Program

This certificate program is designed for M.S.W. Clinical Concentration students who wish to develop advanced competence in couple and family social work. Course work for this certificate focuses on advance practice skills for those students wishing to pursue careers in mental health settings.

Social Work in Disaster Recovery Certificate Program

This certificate program will educate degree-seeking graduate students and train non-degree seeking professionals for culturally competent practice, advocacy, and long-term recovery case management with diverse populations in natural disaster relief efforts. This SWDR Certificate will equip participants with the knowledge, awareness, and skills necessary to provide culturally sensitive disaster relief services. An in-depth curriculum will be developed that emphasizes cultural awareness, evidence-based knowledge development, skills acquisition, and strategic planning with vulnerable populations in disaster relief and long term recovery efforts.

Certificate in Aging Studies

The FSU Pepper Institute on Aging and Public Policy offers an opportunity for concentrated education in aging studies. It provides an educational credential for students with an interest in aging, which indicates their completion of a multi-disciplinary course of study in the study of aging and old age. For further information, visit <http://www.pepperinstitute.org/certificatemain.html>.

School Social Worker Certification

Students who graduate with an MSW meet the requirements for certification as a school social worker in the state of Florida. For more information visit: <http://sss.usf.edu>.

The Arts and Community Practice Certificate

The program is an interdisciplinary certificate designed for undergraduate and graduate students who wish to develop a focused concentration on the application of the arts to community development. This is inclusive of groups and families and addresses all stages of human development. Particular attention will be given to prevention, enrichment, and response to social concerns.

Leadership in Executive and Administrative Development in Social Work (L.E.A.D.)

The mission of this leadership certificate is to educate students about leadership theories and practices and provide students with leadership experience. Learning about leadership will give these students the skills that they will need for middle and executive positions in social service organizations. An in-depth curriculum that emphasizes leadership, decision-making, client-centered management, team building, negotiating, budget and finance, and the successful management of grants will guide our students in the direction of being able to successfully manage social service agencies.

Joint M.S.W./J.D. Program

This program is for students interested in combining an M.S.W. with a degree in law. Persons graduating with this dual degree go into areas such as family law, child advocacy, domestic violence, public policy, and public defense. Students interested in this dual degree must be admitted simultaneously and independently to both FSU's College of Social Work and College of Law.

Joint M.S.W./M.P.A. Program

FSU's Reuben O'D. Askew School of Public Administration & Policy and the College of Social Work offer a joint degree program leading to the degree of Masters of Social Work and Masters of Public Administration. This is one of the few joint degree programs in these fields offered in the U.S. This program prepares students for positions in public, private and nonprofit human service organizations by gaining knowledge in social work and public administration. Students must be admitted to both graduate programs independently.

Joint M.S.W./M.S. in Criminology and Criminal Justice

The M.S.W. /M.S. is a joint collaboration between the College of Social Work and the College of Criminology and Criminal Justice. The joint degree will be for graduate students in both programs who wish to expand their understanding of the connection between these two fields of study and gain expertise in work with forensic clients. Students must be admitted to both graduate programs independently.

Field Education

Field education is an essential component of the program and is designed provide you with an educationally sound, supervised agency internship offering learning experiences that:

1. Enhance your ability to integrate theory into effective evidence-based social work practice
2. Broaden your range of skills for performing high quality social work functions
3. Strengthen your awareness of attitudes, motivations, and judgments identified with the profession of social work

The Office of Field Education is responsible assigning internships after collaboration with you and prospective field agency representative. Internships are planned on an individual basis, with information gathered from the "Field Applications" provided by you. These applications offer you the opportunity to share your interests, location preferences, and other important facts. If you have a felony conviction you may be ineligible for certain internships due to agency requirements, but a field faculty member will discuss appropriate options available. Field education agencies are carefully selected on the basis of a contractual

agreement to provide experiences in professional practice, a range of educationally appropriate activities, and to make personnel and resources available for this purpose.

Agencies affiliating with the College of Social Work represent the diversity found in social services throughout Florida and South Georgia. The College offers a wide array of internships in both public and private agencies, and with diverse populations of clients in areas such as child welfare, health, mental health, family counseling, aging, and corrections.

Continuing Education

The program of continuing education at the College 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 College 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.

College of Social Work Scholarships

Instructions on applying for scholarships are made available in December each year from the College (phone 850-644-4751 or 1-800-378-9550). Applications are accepted January – March 1. Awards are for fall semester only, except as noted (see Hurrell & Montgomery Scholarships). Deadline dates and applications are available on the College of Social Work Web site. <http://csw.fsu.edu/prospective-scholarships.html>.

Citrus Health Network Scholarship for Graduate Students

For full- or part-time graduate students who are interested in working in the behavioral health care field (e.g., mental health & substance abuse), and would consider working in the Miami-Dade County area. Estimated award amount: \$750-1500.

Mark DeGraff and Lula Hamilton DeGraff Scholarship

For full-time senior undergraduate or full- or part-time graduate students who are interested in working with or conducting research relating to youth. Estimated award amount: \$1000-1500.

Joanna F. Gorman Scholarship

For full-time upper-level undergraduate or graduate students (MSW or doctoral) who plan a career in the field of child welfare, maternal and child health, community mental health or primary prevention in mental health or health. Estimated award amount: \$2000-3000.

Dianne F. Harrison Scholarship

This award is presented at Spring Convocation for "Best Dissertation Prospectus." No application necessary. Estimated award amount: \$500.

Robert P. Hurrell Scholarship for Field Instruction

For Social Work majors who demonstrate a commitment to the field of aging or military social work. This stipend is offered each semester & is to be used while the student is completing a field practicum in one of these areas. Estimated award amount: \$2500-4500.

Margaret H. Jacks Scholarship in Aging

For full- or part-time MSW students who have completed at least one course on aging or demonstrated a commitment to the field of aging. Estimated award amount: \$500-1000.

Richard M. King Scholarship in Social Work and Business Administration

For full- or part-time graduate students who are interested in earning both an MSW and a Master's in Business Administration. Estimated award amount: \$2000-3000.

Koalska Undergraduate Scholarship

For full-time undergraduate students whose parents did not attend college. Financial need considered. Estimated award amount: \$1500.

Joyce Harper Laidlaw Scholarship in Child Welfare

For graduate students who demonstrate dedication and commitment to work in the area of child welfare, and show financial need. Estimated award amount: \$1500-2500.

Coyle and Mable Moore Scholarship

For full-time Social Work students who show evidence of good character & citizenship, volunteer work, and financial need. Estimated award amount: \$750-1500.

Sarah Sealy Morrill Scholarship

For Social Work majors with interest in the field of community mental health. Estimated award amount: \$200-500.

MSW Class of 1975 March Graduates Scholarship

For two-year full-time MSW students interested in community-based practice, advocacy or public policy, with evidence of commitment to social justice concerns. Estimated award amount: \$250-500.

Bernard Scher Undergraduate Scholarship

For undergraduate (60 credit hours completed at college level) Social Work majors enrolled in Social Work classes, with overall GPA of at least 3.5. Essay on "Social Work Values" required. Estimated award amount: \$500-750.

Guy and Delores Spearman Scholarship

For BSW or MSW students from Brevard County with overall GPA of 3.0 or greater. Estimated award amount: \$1500-3000.

Maurice M. and Patricia V. Vance Scholarship

For MSW or Ph.D. students returning to school, after a hiatus of at least two years, to forward their professional careers in social work. Academic achievement, financial need, and dedication to the field are considered, with the greatest emphasis on dedication. Estimated award amount: \$1000.

Victoria E. Warner Scholarship

For Florida A & M University graduates currently enrolled in MSW program at FSU (full- or part-time). Estimated award amount: \$1000-1500.

Patricia V. Vance MSW Student of the Year Award

This recognition award is given annually to a M.S.W. student who has demonstrated to an outstanding degree those qualities of committed leadership and service that the social work profession acclaims. The award was designated as the Vance Award in recognition of Mrs. Patricia V. Vance, former associate dean and professor emeritus of the College of Social Work. Members of ASSW select the awardees.



COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Dean: Sally McRorie

The College of Visual Arts, Theatre, and Dance was formed in 2005, with the combination of the former School of Visual Arts and Dance and the School of Theatre. The college has six academic units: the Departments of Art, Art History, Art Education, Interior Design, Dance, and the School of Theatre. These academic units offer an extensive program of instruction in all areas of the visual arts, theatre and dance. In fact, every level of undergraduate and graduate degree that a university can offer in these areas is represented within the college, including the established terminal degree in each discipline. Accordingly, the college is unique in the state of Florida.

Enhancement of the fine and performing arts is one of Florida State University's specific goals as presented in its mission statement. The comprehensive nature and consistent quality of the college may be credited in large part to the recognition and support for the arts evident in the University. The very idea of arts training within a university context is held to be fundamentally important to an individual's education in today's society. The College of Visual Arts, Theatre and Dance shares much in common with an independent arts school, but the differences are more important than the similarities. The University strives toward education of the whole person, and it has a great variety of cultural and curricular resources to reach this end. Therefore, our students have the opportunity to benefit from the entire University, a warm and friendly residential college and major graduate research institution. There is no substitute for this environment.

The college promotes the visual arts, theatre and dance within this community. Its goal is to provide a broad-based liberal arts education for students, while at the same time training them to be dancers, actors, designers, artists, scholars, teachers, or other professionals in the field. It functions to enrich their lives and to provide them with the means of self-expression in an increasingly complex and impersonal technological society—a society ever more dependent upon visual language and information. The study and practice of the arts are therefore viewed as a necessary link in the educational system, both as a learning process and as a means of personal fulfillment. Measures are applied within the College—and indeed throughout the Florida State University campus—to keep the spirit of open inquiry vital and productive.

Regardless of the department of a student's major, the College of Visual Arts, Theatre, and Dance provides an unusual opportunity for working with a distinguished faculty of nationally and internationally recognized artists and scholars, all of whom teach undergraduate as well as graduate students.

Facilities

In addition to the lecture rooms, general classrooms, seminar rooms, and media-specific laboratories (e.g., printmaking, electronic imaging, ceramics, sculpture, photography, and the like), three specialized facilities merit particular mention. First, art students in designated degree programs are provided individual studios in two large "warehouses" 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. Second, dance students train in spacious, comfortable studios and perform in their own fully equipped professional dance theatre, experimental black box theatre, and grand salon; in addition, students explore dance technology in state-of-the-art labs. Also, theatre students train and perform in four venues, including two traditional proscenium theatres, a lab theatre, and a stage for student-produced works.

The Florida State University Museum of Fine Arts

The Florida State University Museum of Fine Arts is first and foremost an extension of the teaching mission of the college. Large, modern, and well equipped, it houses the permanent collection and several times a year hosts faculty and student shows, including MFA graduate exhibitions. In addition, the college 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 John and Mable Ringling Museum of Art

Beginning with the new millennium, 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 College of Visual Arts, Theatre, and Dance, as well as many other areas within Florida State University.

Certificate Program in Museum Studies

The College of Visual Arts, Theatre, and Dance, along with the College of Arts and Sciences, the College of Education, the College of Human Sciences, and the College of Information, offers an interdisciplinary program in museum studies. The program leads to a certificate in museum studies for graduate or postgraduate students who wish to supplement their academic knowledge with specific expertise in the museum field. A strong emphasis is placed on preparing students for the profession with career guidance and planning, informal discussions with museum professionals, mentorships, and seminars on professional training. The program is available to graduate students in art, art education, art history, dance, interior design, 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

The University offers many opportunities for international study open to all qualified state university students. Study-abroad programs range in nature from long-established study centers in Florence, Italy, and London, England, to recently developed programs in countries such as Spain, France, and South Africa. Operated by Florida State University, they provide the opportunity for a truly rewarding educational and cultural experience. Representing as it does a collegial body of students of the arts, the College of Visual Arts, Theatre, and Dance has a particular affinity for the Florence program, one which has led to a history of involvement since the founding of the program in 1966, largely through the efforts of the art history faculty. In every year that it has existed, at least one member of the college faculty has taught in Florence, and the college has significant representation among the students studying there. More recently, greater emphasis has been placed on the opportunities at the London and Valencia Centers. Students of theatre, art, dance, design,

and art history flourish in the rich, humanistic environments of these magnificent cities and cultural centers. This they can do usually without disrupting their sequence of courses and without loss of residency since the Florence, London, and Valencia campuses are true extensions of the Tallahassee campus.

Athamor

For the past 20 years the college has published *Athamor*, a well-respected art history journal which presents scholarly articles by graduate students from universities across the nation. The journal results in part from an art history graduate student symposium conducted on campus each 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 College

By and large, the college has few requirements that 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.



FLORIDA'S STATEWIDE COURSE NUMBERING SYSTEM

Florida's Statewide Course Numbering System

Courses in this *General Bulletin* are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System. This numbering system is used by all public postsecondary institutions in Florida and 33 participating non-public 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 participating institutions that offer the course, with a few exceptions (Exceptions are listed below.)

For example, a survey course in social problems is offered by 35 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 that 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 to identify the course.

Authority for Acceptance of Equivalent Courses

Section 1007.24(7), Florida Statutes, states:

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

Exceptions to the General Rule for Equivalency

The following courses are exceptions to the general rule for course equivalencies and may not transfer. Transferability is at the discretion of the receiving institution:

- Courses not offered by the receiving institution
- Courses with the last three digits ranging from 900-999 (e.g., ART 2905)
- College preparatory and vocational preparatory courses
- Internships, practica, clinical experiences, and study abroad courses with numbers other than those ranging from 900-999
- Applied performance or studio courses in Art, Dance, Interior Design, Music and Theatre
- Skills courses in Criminal Justice
- Graduate courses
- For courses at non-regionally accredited institutions, courses offered prior to the established transfer date of the course

Questions about the Statewide Course Numbering System and appeals regarding course credit transfer decisions should be directed to: the Office of the Dean of The Faculties at Florida State University, (850) 644-6876, or the Florida Department of Education, Office of Articulation, 1401 Turlington Building, Tallahassee, FL 32399-0400. Special reports and technical information may be requested by calling the Statewide Course Numbering System office at (850) 245-0427, SunCom at 205-0427, or through the Internet at <http://scns.fldoe.org>.

COURSE PREFIXES, DEFINITIONS, AND LOCATIONS

How to Find a Course:

The following list presents course subjects alphabetically by letter prefix. The column to the right contains the 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

Prefix	Definition	Program(s)
ACG	Accounting: General	Accounting
ADE	Adult Education	Educational Leadership and Policy Studies Educational Psychology and Learning Systems Communication
ADV	Advertising	
AFA	African-American Studies	African-American Studies
AFH	African History	History
AFR	Aerospace Studies	Aerospace Studies
AMH	American History	History
AML	American Literature	English
AMS	American Studies	American and Florida Studies
ANG	Anthropology: Graduate	Anthropology
ANT	Anthropology	Anthropology
ARA	Arabic Language	Modern Languages and Linguistics
ARE	Art Education	Art Education
ARH	Art History	Art Art History Classics
ART	Art	Art
ASH	Asian History	Classics History
ASN	Asian Studies	Asian Studies Russian and East European Studies Physics
AST	Astronomy	Physics
BCC	Basic Clinical Clerkship	Medicine
BCH	Biochemistry (Biophysics)	Biological Science Chemistry and Biochemistry
BME	Biomedical Engineering	Chemical and Biomedical Engineering
BMS	Basic Medical Sciences	Medicine
BOT	Botany	Biological Science
BSC	Biological Sciences	Biological Science
BUL	Business Law	Risk Management/Insurance and Real Estate and Program in Business Law
CAP	Computer Application Development	Computer Science
CBH	Comparative Psychology and Animal Behavior	Psychology
CCE	Civil Construction Engineering	Civil and Environmental 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 Software Engineering	Computer Science
CES	Civil Engineering Structures	Civil and Environmental Engineering
CGN	Civil Engineering	Civil and Environmental Engineering
CGS	Computer General Studies	Childhood Education, Reading, and Disability Services Communication Disorders Computer Science Educational Leadership and Policy Studies Management Information Systems Family and Child Sciences
CHD	Child Development	
CHI	Chinese	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 Science and Information Systems	Computer Science
CJC	Corrections	Criminology and Criminal Justice
CJE	Law Enforcement	Criminology and Criminal Justice
CJJ	Juvenile Justice	Criminology and Criminal Justice
CJL	Law and Process	Criminology and Criminal Justice
CLA	Classical and Ancient Studies	Classics History
CLP	Clinical Psychology	Psychology
CLT	Classical Literature in Translation	Classics
CNT	Computer Networks	Computer Science
COA	Home Economics: Consumer Affairs	Textiles and Consumer Sciences
COM	Communication	Communication
COP	Computer Programming	Computer Science
COT	Computing Theory	Computer Science
CPO	Comparative Politics	Political Science
CPS	Comparative Policy Studies	Social Science
CRW	Creative Writing	English
CTE	Home Economics: Clothing, Textiles and Merchandising	Textiles and Consumer Sciences Interior Design
CWR	Civil Water Resources	Civil and Environmental Engineering
CZE	Czech Language	Modern Languages and Linguistics
DAA	Dance, Emphasis on Activities	Dance
DAE	Dance Education	Dance Sport Management, Recreation Management and Physical Education
DAN	Dance	Dance
DEM	Demography	Sociology

DEP	Developmental Psychology	Educational Psychology and Learning Systems	EGN	Engineering: General	Chemical and Biomedical Engineering Civil and Environmental Engineering Electrical and Computer Engineering Industrial Engineering Mechanical Engineering Statistics
DIE	Dietetics	Psychology Nutrition, Food and Exercise Sciences	EIN	Industrial Engineering	Industrial Engineering
DIG	Digital Media	Art	ELD	Education: Specific Learning Disabilities	Childhood Education, Reading, and Disability Services
EAB	Experimental Analysis of Behavior	Psychology	EMA	Materials Engineering	Industrial Engineering Mechanical Engineering
EAP	English as a Second Language for Academic Purposes	English Middle and Secondary Education	EME	Education: Technology and Media	Childhood Education, Reading, and Disability Services Educational Leadership and Policy Studies Educational Psychology and Learning Systems
EAS	Aerospace Engineering	Mechanical Engineering	EML	Engineering: Mechanical	Mechanical Engineering
ECH	Engineering: Chemical	Chemical and Biomedical Engineering	EMR	Education: Mental Retardation	Childhood Education, Reading, and Disability Services
ECO	Economics	Economics	ENC	English Composition	English
ECP	Economic Problems and Policy	Economics Finance	ENG	English: General	English
ECS	Economic Systems and Development	Economics	ENL	English Literature	English
EDA	Education: Administration	Educational Leadership and Policy Studies	ENV	Engineering: Environmental	Civil and Environmental Engineering Geological Sciences Meteorology Oceanography Industrial Engineering
EDE	Education: Elementary	Childhood Education, Reading, and Disability Services	ESC	Earth Science	
EDF	Education: Foundations and Policy Studies	Educational Leadership and Policy Studies Educational Psychology and Learning Systems Middle and Secondary Education	ESI	Industrial/Systems Engineering	
EDG	Education: General	Childhood Education, Reading, and Disability Services Educational Leadership and Policy Studies Educational Psychology and Learning Systems Middle and Secondary Education	EUH	European History	Classics History
EDH	Education: Higher	Educational Leadership and Policy Studies	EUS	European Studies	Russian and East European Studies
EDM	Education: Middle School	Educational Leadership and Policy Studies Middle and Secondary Education	EVI	Education: Visually Impaired-Blind	Childhood Education, Reading, and Disability Services
EDP	Educational Psychology	Educational Psychology and Learning Systems	EVT	Education: Vocational/Technical	Educational Leadership and Policy Studies
EDS	Education Supervision	Childhood Education, Reading, and Disability Services Educational Leadership and Policy Studies	EXP	Experimental Psychology	Psychology
EEC	Education: Early Childhood	Childhood Education, Reading, and Disability Services	FAD	Family Development	Family and Child Sciences
EED	Education: Emotional Disorders	Childhood Education, Reading, and Disability Services	FIL	Film	Communication Motion Picture, Television, and Recording Arts
EEE	Engineering: Electrical and Electronic	Electrical and Computer Engineering	FIN	Finance	Finance Multinational Business Operations
EEL	Engineering: Electrical	Electrical and Computer Engineering	FLE	Foreign Language Education	Classics Middle and Secondary Education
EES	Environmental Engineering Science	Civil and Environmental Engineering	FOL	Foreign and Biblical Languages	Modern Languages and Linguistics
EEX	Education: Exceptional Child-Core Competencies	Childhood Education, Reading, and Disability Services	FOS	Food Science	Nutrition, Food and Exercise Sciences
EGI	Education: Gifted	Childhood Education, Reading, and Disability Services	FOW	Foreign and Biblical Languages, Comparative Literature (Writings)	Modern Languages and Linguistics
EGM	Engineering Science	Mechanical Engineering	FRE	French Language	Modern Languages and Linguistics
			FRT	French in Translation and/or Translation Skills	Modern Languages and Linguistics
			FRW	French Literature (Writings)	Modern Languages and Linguistics

FSS	Food Service System	Hospitality Nutrition, Food and Exercise Sciences	ISC	Interdisciplinary Sciences	Biological Science Chemistry and Biochemistry Computational Science Meteorology Oceanography Psychology Management Information Systems
GEA	Geography: Regional Areas	Geography	ISM	Information Systems Management	
GEB	General Business	Accounting Entrepreneurship and Small Business Management Finance Management Management Information Systems Marketing Geography	ISS	Interdisciplinary Social Sciences	Social Science
GEO	Geography: Systematic	Geography	ITA	Italian Language	Modern Languages and Linguistics
GER	German	Modern Languages and Linguistics	ITT	Italian Literature in Translation	Modern Languages and Linguistics
GET	German Literature in Translation	Modern Languages and Linguistics	ITW	Italian Literature (Writings)	Modern Languages and Linguistics
GEW	German Literature (Writings)	Modern Languages and Linguistics	JPN	Japanese	Modern Languages and Linguistics
GFD	Geophysical Fluid Dynamics	Geophysical Fluid Dynamics	JPT	Japanese Literature in Translation	Modern Languages and Linguistics
GIS	Geographic Information Systems	Geography	KOR	Korean Language and Literature	Modern Languages and Linguistics
GLY	Geology	Geological Sciences	LAE	Language Arts and English Education	Childhood Education, Reading, and Disability Services English Middle and Secondary Education
GMS	Graduate Medical Sciences	Medicine	LAH	Latin American History	History
GRA	Graphic Arts	Art	LAS	Latin American Studies	Latin American and Caribbean Studies
GRE	Classical Greek (Language Study)	Classics	LAT	Latin (Language Study)	Classics
GRW	Classical Greek Literature (Writings)	Classics	LAW	Law	Law
HBR	Modern Hebrew Language	Modern Languages and Linguistics Religion	LEI	Leisure	Sport Management, Recreation Management and Physical Education
HEE	Home Economics Education	Family and Child Sciences Textiles and Consumer Sciences	LIN	Linguistics	Anthropology Communication Disorders English Middle and Secondary Education Modern Languages and Linguistics
HFT	Hospitality Management	Hospitality Management	LIS	Library and Information Studies	Childhood Education, Reading, and Disability Services Information Studies English
HHD	Housing and Home Design	Textiles and Consumer Sciences	LIT	Literature	Classics
HIS	General History and Historiography	History	LNW	Latin Literature (Writings)	Mathematics
HME	Home Economics: Home Management and Equipment	Textiles and Consumer Sciences	MAA	Mathematics: Analysis	Mathematics
HOE	Home Economics: General	Family and Child Sciences Textiles and Consumer Sciences	MAC	Mathematics: Calculus and Precalculus	Mathematics
HSC	Health Sciences	Health Policy Research Middle and Secondary Education Nutrition, Food and Exercise Sciences	MAD	Mathematics: Discrete	Mathematics
HUM	Humanities	Humanities	MAE	Mathematics Education	Childhood Education, Reading, and Disability Services Mathematics Middle and Secondary Education
HUN	Human Nutrition	Nutrition, Food and Exercise Sciences	MAN	Management	Finance Management Marketing Multinational Business Operations
IDS	Interdisciplinary Studies	Childhood Education, Reading, and Disability Services	MAP	Mathematics: Applied	Mathematics Meteorology Oceanography
IHS	Interdisciplinary Health Sciences	Medicine	MAR	Marketing	Marketing Multinational Business Operations
IND	Interior Design	Interior Design	MAS	Mathematics: Algebraic Structures	Mathematics
INP	Industrial and Applied Psychology	Psychology			
INR	International Relations	International Affairs Political Science			

MAT	Mathematics	Mathematics	PEL	Physical Education Activities (General): Land-Object Centered	Sport Management, Recreation Management and Physical Education
MCB	Microbiology	Biological Science	PEM	Physical Education Activities (General): Land-Performance Centered	Sport Management, Recreation Management and Physical Education
MEL	Medical Science Electives	Medicine	PEN	Physical Education Activities (General): Water, Snow, Ice	Oceanography Sport Management, Recreation Management and Physical Education
MET	Meteorology	Meteorology	PEO	Physical Education Activities (Professional): Land-Object Centered	Sport Management, Recreation Management and Physical Education
MGF	Mathematics: General and Finite	Mathematics	PEP	Physical Education Activities (Professional): Land-Performance Centered	Sport Management, Recreation Management and Physical Education
MHF	Mathematics: History and Foundations	Mathematics	PET	Physical Education Theory	Educational Psychology and Learning Systems Nutrition, Food and Exercise Sciences
MHS	Mental Health Services	Childhood Education, Reading, and Disability Services Educational Psychology and Learning Systems	PGY	Photography	Art
MMC	Mass Media Communication	Communication	PHC	Public Health Concentration	Health Policy Research
MOB	Molecular Biophysics	Molecular Biophysics	PHH	Philosophy, History of	Philosophy
MSL	Military Science and Leadership	Military Science	PHI	Philosophy	Philosophy Religion
MTG	Mathematics: Topology and Geometry	Mathematics	PHM	Philosophy of Man and Society	Philosophy Political Science
MUC	Music: Composition	Music	PHP	Philosophers and Schools	Philosophy
MUE	Music Education	Music	PHY	Physics	Chemical Physics Physics
MUG	Music: Conducting	Music	PHZ	Physics: Continued	Physics
MUH	Music: History/Musicology	Music	POR	Portuguese Language	Modern Languages and Linguistics
MUL	Music Literature	Music	POS	Political Science	Political Science Public Administration and Policy
MUM	Music: Commercial/Management/Administration	Music	POT	Political Theory	Political Science
MUN	Music Ensembles	Music	POW	Portuguese Literature (Writings)	Modern Languages and Linguistics
MUO	Music: Opera/Music Theatre	Music	PPE	Personality	Psychology
MUR	Music: Church	Music	PRT	Portuguese in Translation	Modern Languages and Linguistics
MUS	Music	Music	PSB	Psychobiology	Biological Science Educational Psychology and Learning Systems
MUT	Music: Theory	Music	PSC	Physical Sciences	Psychology Chemistry and Biochemistry Physics
MUY	Music: Therapy	Music	PSY	Psychology	Psychology
MVB	Applied Music: Brasses	Music	PUP	Public Policy	Political Science
MVH	Historical Instruments	Music	PUR	Public Relations	Communication
MVJ	Applied Music: Jazz	Music	QMB	Quantitative Methods in Business	Finance Management Information Systems Marketing Statistics
MVK	Applied Music: Keyboard	Music	RCS	Rehabilitation Counseling Services	Childhood Education, Reading, and Disability Services
MVO	Applied Music: Other Instruments	Music	RED	Reading	English
MVP	Applied Music: Percussion	Music	RED	Reading Education	Childhood Education, Reading, and Disability Services Middle and Secondary Education
MVS	Applied Music: Strings	Music			
MVV	Applied Music: Voice	Music			
MVW	Applied Music: Woodwinds	Music			
NGR	Nursing: Graduate	Nursing			
NUR	Nursing: Generic Undergraduate	Nursing			
OCB	Biological Oceanography	Oceanography			
OCC	Chemical Oceanography	Oceanography			
OCE	General Oceanography	Oceanography			
OCG	Geological Oceanography	Oceanography			
OCP	Physical Oceanography	Mathematics Meteorology Oceanography Communication			
ORI	Oral Interpretation	Communication			
PAD	Public Administration	Public Administration and Policy			
PAX	Peace Studies	International Affairs			
PCB	Process Biology	Biological Science			
PCO	Psychology for Counseling	Educational Psychology and Learning Systems			

REE	Real Estate	Risk Management/Insurance and Real Estate and Program in Business Law	THE	Theatre Studies and General Resources	Theatre
REL	Religion	Religion	TPA	Theatre Production and Administration	Theatre
RMI	Risk Management/Insurance	Risk Management/Insurance and Real Estate and Program in Business Law	TPP	Theatre Performance and Performance Training	Theatre
RTV	Radio-Television	Communication	TSL	Teaching English as a Second Language	Childhood Education, Reading, and Disability Services
RUS	Russian Language	Modern Languages and Linguistics			Middle and Secondary Education
RUT	Russian Literature in Translation	Modern Languages and Linguistics	TTE	Transportation Engineering	Civil and Environmental Engineering
RUW	Russian Literature (Writings)	Modern Languages and Linguistics	URP	Urban and Regional Planning	Urban and Regional Planning
SCE	Science Education	Biological Science Chemistry and Biochemistry Childhood Education, Reading, and Disability Services Meteorology Middle and Secondary Education	URS	Urban and Regional Studies	Urban and Regional Planning
SCW	Serbo-Croatian Literature (Writings)	Modern Languages and Linguistics	WOH	World History	History
SDS	Student Development Services	Educational Leadership and Policy Studies Educational Psychology and Learning Systems	WST	Women's Studies	Women's Studies
SEC	Serbo-Croatian Language	Modern Languages and Linguistics	ZOO	Zoology	Biological Science
SED	Speech Education	Communication			
SLL	Slavic Languages	Modern Languages and Linguistics			
SOP	Social Psychology	Psychology			
SOW	Social Work	Social Work			
SPA	Speech Pathology and Audiology	Communication Disorders			
SPC	Speech Communication	Communication			
SPM	Sports Management	Sport Management, Recreation Management and Physical Education			
SPN	Spanish Language	Modern Languages and Linguistics			
SPS	School Psychology	Educational Psychology and Learning Systems			
SPT	Spanish Literature in Translation and/or Translation Skills	Modern Languages and Linguistics			
SPW	Spanish Literature (Writings)	Modern Languages and Linguistics			
SRK	Sanskrit Language	Religion			
SSE	Social Studies Education	Childhood Education, Reading, and Disability Services Middle and Secondary Education			
STA	Statistics	Statistics			
SYA	Sociological Analysis	Sociology			
SYD	Sociology of Demography/Area Studies/Sociological Minorities	Sociology			
SYG	Sociology: General	Sociology			
SYO	Social Organization	Sociology			
SYP	Social Processes	Educational Psychology and Learning Systems Sociology			
TAX	Taxation	Accounting			

ACADEMIC DEPARTMENTS AND PROGRAMS

Department of ACCOUNTING

COLLEGE OF BUSINESS

Chair: Martin G. Fennema; **Andersen Professor:** Hillison; **Andersen Professor:** Paterson; **Deloitte Professor:** Morton; **Ernst and Young Professor:** Fennema; **KPMG Fellow:** Billings; **Professors:** Hillison, R.C. Icerman; **Associate Professors:** Bathke, Billings, Bowen, Dusenbury, Fennema, Gerard, Heflin, J.D. Icerman, Morton, Paterson, Stevens; **Assistant Professors:** Baik, Hobson, Lulseged, Perkins; **Associates in Accounting:** Pierno, Sudano; **Assistant in Accounting:** Greenberg

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 nation's leading universities.

The accounting faculty is recognized nationally for excellence in teaching and research. Faculty members have expertise in a wide variety of areas including financial accounting and reporting, managerial accounting, governmental accounting, accounting systems, assurance services, and taxation.

The department maintains close relationships with alumni and the accounting profession. These relationships provide students the opportunity to interact with professionals and to become more familiar with the accounting environment in business. The external support of alumni and friends of the accounting program provides for many enhancements of the learning environment, which result in the Florida State University maintaining one of the leading accounting programs in the country.

Students and faculty in accounting have access to state-of-the-art facilities and materials for learning and research. Up-to-date computer technology, excellent library materials, and a wide range of research databases are available. Ongoing research in the department covers a wide range of activities, including empirical analyses of financial reporting issues, the examination of behavioral issues in accounting and auditing, 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. 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. The MAcc program is structured as a full-time, day-time program; however, students may attend on a part-time basis under certain circumstances. Full-time students who have met all prerequisites complete the program in one calendar year. New students may enter the program at the beginning of any term.

A number of fellowships and teaching/research assistantships are awarded by the Department of Accounting to applicants with strong academic credentials.

Applications to the MAcc program are considered for anyone with an undergraduate degree in accounting. Other undergraduate majors are also considered for admission, but are advised to consult the Master of Accounting Program for Non-business Majors. Admission decisions

are made by an admissions committee after considering all relevant information. Applicants are required to submit 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 215 RBB, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110 (gradprog@cob.fsu.edu).*

Master of Accounting Program for Non-business Majors

The Department of Accounting also offers a MAcc program for non-business undergraduate majors. Full-time students should be able to complete the 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 course work described above. Although these courses can be completed as a special student or a second degree-seeking student, students in this program can be admitted to the MAcc program upon meeting the requirements, typically a 3.0 GPA and 500 GMAT score. Students in the program must maintain at least a 3.0 GPA.

Required Undergraduate Foundation Courses

Financial Accounting and Reporting I
Cost Accounting I
Calculus for Business and the Nonphysical Sciences
Quantitative Methods for Business Decisions
Economics of the Price System
Financial Accounting and Reporting II
Cost Accounting II
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 University offers several supplementary fellowship awards to doctoral students that are in addition to the standard financial assistance provided by the College of Business. All applicants and continuing students are considered automatically for these awards. Additionally, current doctoral students have been successful in winning nationally competitive fellowships from international accounting firms, the McKnight Foundation, the American Accounting Association, and the American Institute of Certified Public Accountants.

Requirements

Graduate-Level Foundation Courses

The courses below are in addition to the general prerequisites of ECP 5706, MAN 5716, and statistics described elsewhere in this *Graduate Bulletin*, as well as to the calculus I and II requirement:

- ACG 5135 Financial Accounting Theory
 ACG 5356 Advanced Management Accounting
 FIN 5445 Problems in Financial Management

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 6696 Seminar in Financial Accounting and Auditing Research (3)
 ACG 6835 Seminar in Behavioral Accounting Research (3)
 ACG 6885 Introduction to Accounting Research
 ACG 6896 Seminar in Capital Market-Based Accounting Research (3)
 ACG 6916 Supervised Research (3)
 ACG 6939 Seminar in Accounting (3)
 FIN 6808 Foundations of Financial 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 four courses and/or seminars are selected by the candidate in consultation with the primary area adviser. The support area may be chosen from an area either within or outside the College of Business. The nature of research in accounting is increasingly interdisciplinary, drawing on tools and concepts from economics, mathematics, statistics, finance, psychology, and other disciplines. These fields represent common areas in which recent doctoral students have chosen to take their support area course work.

For application forms and additional information related to graduate accounting programs, contact *The Graduate Office, Room 215 RBB, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or via email at gradprog@cob.fsu.edu.

Definition of Prefixes

ACG—Accounting: General

GEB—General Business

TAX—Taxation

Graduate Courses

Note: The 5000 level courses are reserved exclusively for graduate students. No courses carrying both undergraduate and graduate credit are offered. Courses that may be repeated for credit are designated by “r” immediately following the course number.

ACG 5026. Financial Reporting and Managerial Control (3). This course provides a basic understanding of accounting systems and financial statements as a foundation for analysis. The course also addresses cost systems and controls as they pertain to organizational control.

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 information systems major. The course furnishes students with knowledge and skills to account for and to audit firms that are using emerging technologies. It provides students with tools to identify and assess the risks of insecure electronic commerce systems and to formulate security-conscious solutions.

ACG 5466. Enterprise Systems and Accounting (3). This course is designed for master of accounting students who are specializing in accounting information systems, assurance services or corporate accounting. The course furnishes students with the knowledge and skills to implement, use and audit enterprise-wide information systems. Students are expected to enter the course with an understanding of databases, as the database is the most crucial component of an enterprise-wide information system.

ACG 5505. Government and Not-for-Profit Accounting and Auditing (3). Prerequisite: ACG 4201. An introduction to financial reporting and auditing requirements for government and not-for-profit entities.

ACG 5635. Auditing Theory and Application II (3). Prerequisite: ACG 4632. Theory of auditing and development of audit programs; procedures for obtaining audit evidence; auditor responsibility under Securities and Exchange Commission requirements.

ACG 5685. Forensic Accounting (3). Prerequisite: ACG 4632 or equivalent. This course provides in-depth exposure to the forensic accounting process and related audit topics, including identification of fraud risk factors and development of skills in detecting fraud.

ACG 5695. Challenges in Professional Accounting (3). Pre- 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 toward 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 toward 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). (P/F grade only.)

ACG 8976. Master's Thesis Defense (0). (P/F grade only.)

Doctoral

The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases master's candidates may elect 6000 level courses with permission of the instructor and the associate programs.

ACG 6696. Seminar in Financial and Auditing Research (3). Prerequisite: 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 as it relates to accounting and auditing.

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 (1–5). (S/U grade only.) Prerequisite: Consent of associate dean for graduate 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). (P/F grade only.)

ACG 8985. Dissertation Defense Examination (0). (P/F grade only.)

GEB 6904r. Readings For Examination (1–12). (S/U grade only.) This course is designed for PhD students who have completed all of their required 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 *Certificate 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 and Rod and Hope Brim Eminent Scholar in Economics: David MacPherson (Economics); **Mildred and Claude Pepper Eminent Scholar Chair:** Quadagno (Sociology); **Professors:** Barrilleaux (Political Science), Bourgeois (Communication Disorders), Brummel-Smith (Medicine), Charness (Psychology), Fournier (Economics), Weissert (Political Science); **Associate Professor:** Reynolds (Sociology); **Assistant Professors:** Barrett, (Sociology), Bokhari (Economics), Dijkstra (Psychology); Rohlinger (Sociology); **Affiliates:** Brooks, Cowart, Ebener, Ferris, Hinterlong, Kelly, LaPointe, Licht, Lloyd, Miles, Nilsson, Ouimet, Panton, Pomidor, Sachs-Ericsson, Taylor, Thomas, Vinton, Wolfson

The Pepper Institute on Aging and Public Policy serves as a focal point for aging research and education on the campus of 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 and 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, 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.

Admission 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 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.

Program Options

The program offers three concentrations—Aging Policy, Evaluation and Research; Administration in Aging; and Health Care and Aging.

- The Aging Policy, Evaluation and Research concentration prepares graduates entering 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 policies 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 gain an understanding of the special needs and concerns of elders and will learn the administrative skills necessary to manage and evaluate the effectiveness of alternative methods for providing services.
- The Health Care and Aging concentration focuses on the growing interest in health care issues. Long-term care, end-of-life issues, assisted living, and Alzheimer's disease are a few of the special interest areas that students have an opportunity to explore in depth. Graduates develop an understanding of the national health policy system including Medicare and Medicaid and how our national health policy affects the health care of older adults.

Course of Study

The program builds upon a core set of requirements, totaling eighteen (18) semester hours, that reflect the basic skills necessary to administer and evaluate programs and data for aging related professional positions.

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 course work students will take twelve (12) semester hours selected from a list of eligible academic courses provided for each concentration. A total of thirty-six (36) semester hours earned at a minimum of a 3.0 GPA, with a maximum of three (3) semester hours taken S/U, are required for graduation. Additional courses may be available. Please check with the Master's Administrator.

Core Courses

Eighteen (18) semester hours required of all Master's in Aging Studies students.

General Aging (select two)

MHS	6938	Special Topics in Counseling Psychology [Social Psychology of Aging] (3)
PSY	5916	Research Topics in Psychology [Adult Development and Aging] (3)
SOW	5646	Aging and Old Age (3)
SYA	6933	Selected Topics in Sociology [Aging Policy Planning and Services] (3)
SYP	5735	Sociology of Aging (3)

Economics (select one)

ECO	5936	Special Topics [Economics of Aging] (3)
ECO	5936	Special Topics in Economics [Economics of Health] (3)
PAD	5227	Managing Public Financial Resources (3)

Methods (select two)

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	Techniques 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 (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)
URP 5530	Policy and Planning for the Aging (3)

Elective Courses

Twelve (12) Credit Hours required. With the consent of their adviser, students will select courses that meet the needs of their chosen area of concentration.

Aging Policy, Evaluation, and Research Concentration

ECO 5936	Special Topics [Economics of Aging] (3)
PAD 5327	Public Program Evaluation (3)
PAD 6108	Institutions, Policy & Management (3)
POS 5127	State Government and Politics (3)
PUP 5007	Models of Public Policy-Making (3)
SYA 6933	Selected Topics in Sociology [Aging Policy Planning and Services] (3)
SYO 5545	Social Institutions and Complex Organizations (3)
URP 5530	Policy Planning for the Aging (3)

Administration in Aging Concentration

ECO 5936	Special Topics [Economics of Aging] (3)
MAN 5205	Organization Theory (3)
MAN 5206	Organizational Behavior (3)
MAN 5305	Personnel/Human Resource Management (3)
PAD 5417	Human Resource Management (3)
PSY 5916	Selected Research Topics [Adult Development and Aging] (3)
PSY 6919	Seminar in Current Research Topics [Age and Human Performance] (3)
SYA 6933	Selected Topics in Sociology [Aging Policy Planning and Services] (3)
URP 5530	Policy Planning for the Aging (3)

Health Care and Aging Concentration

ECO 5936	Special Topics [Economics of Health] (3)
ECP 5536	Seminar in Health Economics (3)
NGR 5930	Special Topics in Nursing [Advanced Practice Approach to Gerontology] (3)
SOW 5156	Emotional and Social Aspects of Illness (3)
SYA 6933	Selected Topics [Social Psychology of Aging] (3)
SYD 5215	Mortality (3)
SYO 5405	Health Institutions and Social Policy (3)
URP 5520	The American Health System (3)
URP 5522	Regulatory Aspects of Health Care (3)

Internship or Thesis Required of All Students

Six (6) Credit Hours required to complete the degree.
ISS 5945 Practicum in Aging Studies (3-6)

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 course work and a practicum in aging studies.

1. Students should complete nine (9) semester hours of course work 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 upcoming

semester are listed on the Pepper Institute Web site 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), Davis (History), Jumonville (History), Moore (English), Wiegand (Information Studies)

American and Florida Studies is concerned with the culture of the United States and Florida from cross-disciplinary and interdepartmental perspectives. The aim of the program is toward enlarged dimensions of awareness rather than on further refinements of disciplinary analysis. A wide variety of courses is available from many departments. The flexibility of the program gives students an opportunity to develop a curriculum commensurate with their own interests and needs.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Master's Degrees

Students applying for the master of arts program in American and Florida Studies should have had an undergraduate major in one of the American studies areas and must satisfy the director that they are qualified for the type of work offered by the program.

Normally a minimum score of 1000 on the combined verbal and quantitative portions of the Graduate Record Examinations (GRE), a minimum cumulative GPA of 3.0, and three letters of recommendation are required for admission.

The degree candidate must submit an acceptable plan of study which will include either AMS 5809 or AMS 5815.

In almost all cases, the student is expected to write and defend a thesis. A student who elects to write a thesis must complete a minimum of thirty (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 a comprehensive examination. All students must successfully complete the foreign language requirement.

Doctoral Degrees

A doctor of philosophy (PhD) degree in Humanities with a concentration in American Studies is an option for those students who want to combine their interest in American Studies with graduate training in the teaching of Humanities at the college level. The graduate program in Humanities at the Florida State University cooperates closely with American and Florida Studies in tailoring a course of study to fit the needs of the individual student.

Graduate Certificate Program

All students currently enrolled in a graduate program are eligible to apply for the Graduate Certificate program. Work toward the certificate gives graduate students at both the MA and PhD levels in other disciplines, particularly those in the American Studies core areas, an opportunity through interdisciplinary study to develop a deeper understanding of the pluralistic society they inhabit and to learn new ways to conceptualize social issues, culture, and art throughout American history.

The certificate program in American and Florida studies requires twelve (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. The final required project is an article prepared for publication according to the guidelines of a major professional journal. Each student's final program of study must be approved by the director.

Definition of Prefix

AMS—American Studies

Advanced Undergraduate Courses

- AMS 3310. Changing Concepts of the American Character (3).
 AMS 3810. The Life of the Mind in America (3).
 AMS 3932r. Lecture Series in American Problems (3–6). May be repeated to a maximum of six (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). (P/F grade only.)
 AMS 8976r. Master's Thesis Defense (0). (P/F grade only.)

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:** Marlowe, Marrinan, Peters, Schepartz, Uzendoski, Ward; **Assistant Professors:** Hellweg, Parkinson; **Professors Emeriti:** Ho, Paredes; **Courtesy Professor:** Pullen; **Adjunct Professor:** Harmon

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, nautical archaeology, paleodemography, zooarchaeology, 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, and Europe.

Florida State University, through the Department of Anthropology, has established ties with the **Southeastern Archaeological 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 prehistoric mound center, a Hungarian Copper Age site, and Mayan 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 biological anthropology, ethnology, and applied anthropology. Programs sponsored by other University departments of interest to anthropology students include the master's program in historical administration (Department of History), the master's program in ethnomusicology (College of Music), and the international/intercultural education program (College of Education).

Master's Degree in Anthropology

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

The Department of Anthropology offers the master of arts 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 pre-doctoral 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 adviser. For additional information, please refer to <http://www.anthro.fsu.edu>.

All candidates for the master's degree in anthropology must meet the same University-wide foreign language requirement as that described specifically for the master of arts 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*. For the master of science degree, the student must also satisfy the foreign language requirement but not the humanities requirement. Special regulations outlining the several programs offered are available from the Department of Anthropology. For additional information, please refer to <http://www.anthro.fsu.edu>.

Doctor of Philosophy in Anthropology

Admission Requirements

Acceptance into the doctoral program directly from a bachelor's degree program is based on a satisfactory Graduate Record Examinations (GRE) score (combined score of 1200 on quantitative and verbal), an undergraduate grade point average (GPA) of 3.5 or better, a statement of interest and career objectives, and three letters of recommendation. Students with a master's degree from another institution who meet the University requirements (minimum combined score of 1000 on the quantitative and verbal sections of the GRE and a 3.0 GPA) also are welcome to apply.

Upon admission, the doctoral student's previous course work and experience will be evaluated by the departmental Graduate Affairs 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: socio-cultural anthropology, physical anthropology, linguistic anthropology, or archaeological anthropology.

Course Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Students must complete twenty-four (24) semester hours of graded course work beyond the master's level and twenty-four (24) dissertation hours for a total of forty-eight (48) semester hours. Undergraduate students who enter the doctoral program directly will complete a course-type master's degree, which does not require a thesis or paper in lieu of thesis, but which requires completion of thirty-two (32) semester hours of course work, at least twenty-one (21) of which must be taken on a letter-grade basis. Distribution of the twenty-four (24) hours of course work is as follows: most of the hours will be taken in graded courses within the department, but up to six (6) hours of course work outside the Department of Anthropology may be applied to the twenty-four (24) hour requirement, subject to the student's committee and the graduate coordinator. No more than six (6) hours of graded Directed Individual Study (DIS) may be taken for credit.

Specific course requirements are as follows:

1. Students will be required to take core courses in the sub-fields of anthropology in their first year. These courses are as follows:
 - ANG 5117 Core Seminar in Archaeology (3)
 - ANG 5493 Core Seminar in Cultural Anthropology (3)
 - ANG 5513 Core Seminar in Physical Anthropology (3)
2. An advanced seminar at the 6000 level in the major field and a course in research methods, unless this has been completed at the master's level
3. An advanced course in method and theory in each student's major area of study is highly recommended.

Additional Requirements

The doctoral studies committee will evaluate each student's language preparation and make recommendations regarding the appropriate level of language proficiency. Students must demonstrate reading competency of anthropological literature in at least one foreign language. Students will be required to pass the departmental comprehensive examination at the beginning of their third semester in the program. Each student must pass a qualifying examination or complete and defend a pre-doctoral paper before submitting a dissertation prospectus. Each student must have a 3.0 grade point average (GPA) and have satisfied the language requirement before taking the qualifying examinations or defending the pre-doctoral paper. Successful completion of the qualifying examination or defense of the pre-doctoral paper admits the student to candidacy for the doctoral degree.

A dissertation prospectus is due within six weeks of passing the qualifying examination. It is expected that the full dissertation committee will meet for the defense of the prospectus. The dissertation committee is composed of at least three eligible members of the Department of Anthropology faculty and one outside member of the Florida State University graduate faculty.

Dissertation credit hours are anticipated to include fieldwork, data collection and analysis, synthesis, and writing. An oral defense of the dissertation will be held by the dissertation committee and the candidate upon completion of the dissertation. The dissertation must be available to the committee members at least one month before the defense may be scheduled.

Sequenced Course of Study

Students entering the doctoral program with a bachelor's degree will be required to complete the hours required for a master's degree before they begin taking courses at the doctoral level. Full-time PhD students with master's degree in-hand will be expected to complete the required twenty-four (24) 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. Florida State University requires that the dissertation be completed within five years of admission to candidacy.

Doctoral Degree in Humanities

Florida State University offers an interdepartmental doctoral program in humanities. Some areas of anthropological interest (e.g., historical archaeology, religion, and literature) may be appropriate for this program. Students interested in this program should contact the Director of the Program in Humanities for further information.

Definition of Prefix

ANG—Anthropology Graduate

Graduate Courses

ANG 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 5116. Regional Analysis in Archaeology (3). This is an advanced graduate-level seminar designed to explore archaeological approaches to modeling regional social processes. The course is restricted to graduate students who have had some training in archaeological methods and theory at the graduate level. The course considers theoretical frameworks and methodological approaches to understanding anthropological processes that are best studied with the region as the primary unit of analysis. The course also introduces students to classic and contemporary literature related to regional models in geography, anthropology and sociology, and assesses how those models have been applied in specific archaeological contexts. Students are required to gain hands-on experience conducting their own analysis of archaeological data at the regional level.

ANG 5117. Core Seminar in Archaeology (3). This course is designed to guide students to the essential works in archaeology of different parts of the world, whether they are classic readings or cutting-edge research.

ANG 5124. Archaeobotany (3). This course is an introduction to the study of plants' use of plants during prehistoric and historic times, focusing on techniques to recover, analyze and interpret plant remains from archaeological sites.

ANG 5129. Wetlands Archaeology (3). This course provides an introduction to wet site archaeology, incorporating an overview of wet sites, their geographic distribution, methods of excavation, conservation requirements, and the field's contribution to our understanding of the past.

ANG 5134. Nautical Archaeology of the Americas (3). Students will study human interaction with bodies of water, particularly in the maritime environment. Illustrated presentations, readings, and discussions will focus on a variety of cultures and watercraft built or used in the Americas.

ANG 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 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 5145. Origins of Complex Society (3).** This course examines the evolution of ancient complex societies and theories of state origins using a comparative method involving ecological, economic and social approaches to investigate their origins, collapse and sustainability.
- ANG 5155. Regional Archaeology: Southeast United States (3).** Critical evaluation of special problems and processes of cultural evolution and adaptation in the southeast.
- ANG 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, calendrics and astronomy, language and writing, artifacts, architecture, sculpture and painting. Format is seminar with presentations, research reports, and discussion. May be repeated to a maximum of nine (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. Course work 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 5240. Anthropology of Religion (3).** This course addresses the cultural conceptions of supernatural reality, with emphasis on comparative understanding of myth and ritual, the religious experience, and religious evolution and revitalization movements.
- ANG 5242. Symbol and Ritual (3).** This course is an introduction to symbolic approaches in anthropology and the study of ritual. It critically analyzes conceptual mechanisms that anthropologists use in analyzing symbolic activity. Material comes from various parts of the world.
- ANG 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 5269. Economic Anthropology (3).** This course is an introduction to the issues and literature of economic anthropology. This class explores exchange theory, gift and commodity distinctions, and the anthropological use of world-systems theory.
- ANG 5275. Human Conflict: Theory and Resolution (3).** This course provides an introduction to the nature and theories of human conflict from the interdisciplinary perspectives of biological and cultural anthropology, political economy, and the history of warfare. Particular emphasis is placed upon cross-cultural applications.
- ANG 5309. Conquest of the Americas (3).** This course examines the conquest of the Americas. It explores the arts of domination, power and resistance and specific historical encounters where such arts are employed.
- ANG 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 5352. Peoples and Cultures of Africa (3).** This course approaches the study of Africa through the reading and discussion of ethnographies of African life. While situating Africa within broad historical dynamics that shaped the continent, the course also focuses on particular economic, gender, medical, political, and ritual circumstances within which people lead their lives. Ultimately, the course explores African ethnography as a key source for current questions and debates within anthropology, African studies, and other disciplines interested in the analysis of human socio-cultural life.
- ANG 5426. Kinship and Social Organization (3).** This course reviews historical and contemporary anthropological approaches to the study of kinship and social organization by reading and discussing ethnographies of family, marriage, and society throughout the world. Topics include classic theories of descent and alliance, symbolic approaches to kinship and social organization, genetic definitions of human relations, and the impact of new reproductive technologies on definitions of family, bringing the vast ethnographic literature on kinship to bear upon ongoing debates about definitions of family and society.
- ANG 5471. Technology and Social Change (3).** This course introduces the student to anthropological approaches to the study of technology and examines the relationship between technology and social change throughout human prehistory and history. The course explores the systemic relationship between technological developments and economics, politics and social structure in both the past and present, using technology as a reference point for discussing important themes of anthropological and archaeological interest.
- ANG 5478. Cultural Evolution (3).** This course explores ethnographic and archaeological models to understand and explain the various forms of political and economic organizations exhibited by human societies.
- ANG 5491r. Seminar in Social Anthropology (3).** May be repeated to a maximum of six (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 5581. Method and Theory in Human Biology (3).** This course provides an overview of current methods and theory in human biology research with emphasis on adaptation, variation, and biocultural interactions in living human populations. This course also trains students in field methods for assessment of nutrition, growth and development, stress, and health, providing training in systematic ethnographic methods and modeling biocultural interactions.
- ANG 5611. Linguistic Prehistory (3).** This course provides an introduction to underlying concepts and methodology of cross-disciplinary studies that use linguistic data in the investigation of prehistory. Selected case studies convey some of the results of such research.
- ANG 5641. Ethnopoetics (3).** Ethnopoetics uses linguistic patterns to trace the formal structures of texts. Topics addressed in this course include oral poetry, anthropological linguistics, linguistic relativity, ethnopoetic and discourse analyses, speech genres, linguistic transcription and performance, symbolism, ethnomusicology, writing and ethnography.
- ANG 5675. Core Seminar in Linguistic Anthropology (3).** This course offers a broad survey of anthropological linguistics, from the origin and characteristics of human language and its relation to the other animal communication systems, to language structure and its description, principles of linguistic fieldwork, and historical/comparative linguistics. Other topics covered include the following: the interaction of language and culture; sociolinguistics; the ethnography of communication; ethnohistory; language acquisition; language policy and bilingual education; and linguistic prehistory.
- ANG 5677r. Seminar in Linguistic Anthropology (3).** Topics offered will include strong methodological and theoretical components, combined with in-depth coverage of an area or thematic subject. May be repeated to a maximum of nine (9) semester hours.
- ANG 5737. Medical Anthropology (3).** This course examines health and healing in a cross-cultural and evolutionary perspective and investigates the biocultural basis of nutrition, reproduction, and health; biomedicine and other healing systems; and the role of anthropology in global public health.
- ANG 5801. Field Methods in Cultural Anthropology (3).** Course covers the methods and theories associated with cultural anthropological field work, from research design and project preparation to the presentation of reports based on research. Includes supervised field work projects.
- ANG 5824r. Anthropological Fieldwork: Archaeology (1-9).** Use of methodology learned in seminars. May be repeated to a maximum of nine (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 student's academic adviser 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).** (P/F 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 6484. Cultural Analysis (3).** Cultural analysis describes an empirical approach to human behavior that recognizes culture as an organizing principle in all dimensions of human social life, from economic and political pursuits to gender, health, ritual, and reproduction. This course examines the place of culture in such anthropological schools as structural-functionalism, transactionalism, structuralism, symbolic anthropology, and practice theory, as well as in such alternative approaches as cultural materialism and evolutionary psychology.
- ANG 6499r. Research Seminar in Sociocultural Anthropology (3).** Presentation and discussion of research and analysis issues associated with current student and faculty research 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 research projects. Topics vary accordingly. May be repeated 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).** (P/F grade only.)
- ANG 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- ANG 8985. Defense of Dissertation (0).** (P/F grade only.)

APPLIED BIOLOGY:
see Biological Science; Nursing

ARABIC LANGUAGE:
see Modern Languages and Linguistics

**Department of
ART**

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Chair: Joe Sanders; **Professors:** Blakely, Burggraf, Hartwell, Messersmith, Roche, Sanders, Stewart, Williams; **Associate Professors:** Garcia-Roig, Hanessian, Hook, Lindbloom, Roberson, Rubini, Rutkovsky; **Assistant Professors:** Eby, Groeniger, Jones, Mann; **Associate in Art:** Kariko; **Assistants in Art:** Bowens, Raulerson, Simonsen; **Coordinator:** Straus; **Professors Emeriti:** Bell, Fichter

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

It is the graduate student's responsibility, in concert with his or her faculty, to find the appropriate media with which to express an original aesthetic vision. Work may be done in ceramics, electronic media, design, drawing, painting, performance, photography, printmaking, sculpture, video or any combination. The studio workshop class structure and interdisciplinary freedom that is part of the departmental philosophy allow the ideas to dictate the medium that students use.

Student and Faculty Responsibilities

Just as the primary responsibility rests with the students to find their own appropriate media, they are also expected to find an articulate visual language. The MFA program is for those persons who are ambitious and willing to grow as artists. As students, they must search for their own appropriate media and work toward becoming fluid practitioners in art. The faculty is challenged to respond to the students' individual needs, helping them in their search for a personal position in their work.

The representative career choices for graduates in studio art include: professional studio artist (painter, sculptor, photographer, ceramicist, printmaker, multimedia artist, digital arts artist), designer, creative director, illustrator, and production artist, to name the most obvious. Some graduates of the MFA program choose careers in college teaching, while others pursue careers as exhibiting artists or freelance designers. Faculty members are proactive in assisting students with individual professional goals both during and after their degree.

Facilities

The department is housed in four locations, including two large warehouses converted to studio spaces and equipped to meet the needs of working artists. All MFA students are provided with a suitable space to work. In these spaces, students participate in group seminar classes

and individual tutorials, and faculty members will typically 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 may be formal reviews with the student's thesis committee or may be very informal. A rich dialogue always occurs among students.

Graduate students also have access to the department's photography labs, sculpture labs including a foundry, computer labs, printmaking labs and installation rooms. The new Big Bend Contemporary (BBC) gallery in the Arts District of Tallahassee provides an exhibition space devoted to regular MFA exhibitions while also serving other departmental uses. This space offers monthly exhibition opportunities with excellent public exposure.

Visiting Artist and Scholar Program

The Department of Art recognizes the value of presenting diverse experiences to our students, and the visiting artist and scholar program is essential to this goal. An active visiting artist and scholar program brings in artists, designers and critics from all parts of the country who are experts in their field. They will usually give a public lecture, as well as student critiques, seminars and workshops. The University's annual celebration of Seven Days of Opening Nights also brings prominent artists, critics, and historians to the campus.

Museum of Fine Arts (MOFA)

The Museum of Fine Arts is an integral part of the educational mission of the department. It has a tradition of originating exhibitions of important contemporary and historical issues, as well as bringing to the community some of the best shows other galleries have originated. The program regularly includes national and regional competitions and invitational, faculty, and student exhibitions, along with lectures and symposia devoted to significant developments in art history and art criticism. Graduating students display their thesis exhibitions in the museum. The University and the city offer a variety of other exhibition spaces.

Art History

Art history and criticism are an essential part of the MFA program with at least three courses required. A broad range of courses is available to help provide depth of understanding of fundamental artistic issues.

Financial Assistance

The art department offers financial support in the form of fellowships, teaching assistantships, and technical or laboratory assistantships. Those who are interested in a teaching assistantship are required to take a course in supervised teaching prior to the award. Technical assistantships may be awarded to first-year, second-year, and/or third-year students. Teaching assistantships may be awarded in the second and/or third year of residency except in the case of students with a master's degree or equivalent teaching experience, who may be awarded a teaching assistantship earlier. Financial assistance is awarded based on merit.

The Florence Award

The Florence Award is a highly coveted teaching award given to an outstanding graduate student. The award recipient is provided with an opportunity to teach art classes through the Florida State University International Program in Florence, Italy, generally in the spring term following their degree. In addition, the recipient is provided with an adjunct instructor position in the Department of Art the semester prior to the teaching abroad position. This award is jointly supported by International Programs at Florida State University.

Requirements

Admission

In addition to University admission requirements, the department requires that all applicants submit a portfolio of 20 slides of recent original work and an artist's statement describing and contextualizing the work submitted for review. Where it is necessary, other media, such as videotape or photographs, may be submitted in place of slides. The

Department of Art faculty admits graduate students in the fall of each year. Please contact the art department for more specific admission 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 three-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 thesis exhibition and written component. All students are required to produce an extended artist's statement as part of their graduation thesis exhibition.

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 formal committee reviews in conjunction with their thesis exhibition; 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 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' interests and needs.

ART 5927Cr. Graduate Workshop (1–4). Tutorial. May be repeated to a maximum of fifty-one (51) semester hours.

ART 5928Cr. Graduate Workshop (1–6). Prerequisite: ART 5927C. May be repeated to a maximum of fifty-one (51) semester hours.

ART 5929Cr. Graduate Workshop (4). Prerequisites: ART 5927C, 5928C. 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 fifth and sixth 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

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Chair: Marcia L. Rosal; **Professors:** Anderson, McRorie, Rosal; **Associate Professor:** Villeneuve; **Assistant Professors:** Davenport, Gussak, Orr

The Department of Art Education is the oldest department of its kind in the South. The distinguished faculty in the Department of Art Education is composed of six members, each of whom holds the doctoral degree.

The graduate curricula lead to the master of arts 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 portfolio (slides or CD-ROM) of the candidate's studio work (and the candidate's student work if applicable) in a clear plastic sheet, and a 1,000-word biography that should include career goals and why the applicant is applying to this program. Candidates must achieve either 1000 on the combined verbal/quantitative portions of the GRE or a 3.0 grade point average (GPA) on a 4.0 scale for all hours after the first sixty (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. An interview is required of students applying for option III.

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 in options I and III will be required to write a thesis (a minimum of six [6] semester hours) and complete at least 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 minimum thirty-three (33) 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: comprehensive art education, art education certification, and art therapy. These options represent a diversification in graduate studies that 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 current art education practices. 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, Baroque, modern, and non-Western art; the Department of Philosophy's courses in philosophy of art and aesthetics; and required and elective course work in the art education department.

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 bachelor's 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 the theory and practice of therapeutic techniques in art and to provide clinical experiences that translate theory into practice for the development of professional art therapists. The program is of particular interest to people serving special populations, individuals who work in community health facilities, and those who wish to meet Art Therapy Credentials Board (ATCB) requirements for registration.

The program of studies in art therapy adheres to the American Art Therapy Association (AATA) guidelines for education and is an AATA-approved program. The program includes both academic content and clinical experience. 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 among the visual arts, music, dance, and theatre. Study centers on management and administrative responsibilities and strategies. Course options include the areas of public and private support systems, structures of arts agencies, fundraising, grant writing, personnel management, marketing, education, and programming. The program, requiring a minimum of three (3) semesters to complete, consists of a minimum of thirty-nine (39) semester hours and includes: four courses in the arts administration core (ARE 5262, 5253, 5665, and 5865); a minimum of nine (9) hours in general core requirements (ARE 5245, 5641, 5745, or 5935); nine (9) 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 College of Visual Arts, Theatre and Dance. Applicants need not submit a portfolio.

Certificate Options

The Arts and Community Practice

The certificate program in the arts and community practice is designed for students who wish to develop a focused concentration on the application of the arts to community development. This is inclusive of groups and families, and addresses all stages of human development. Particular attention is given to prevention, enrichment, and response to social concerns.

Students must apply through the program in which they are currently enrolled. Applicants for the certificate program will be accepted from degree-seeking students who are in the MSW or PhD program in social work, MFA program in dance, or MA/MS or PhD program in art education/therapy. Students must have a minimum 3.0 GPA to be accepted into the program.

The program requirements are based on the integration of the theoretical and practical aspects of dance, art education/therapy, and community-based generalist/clinical social work. The requirements include specified 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 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, College 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 administering processes in art. The objectives of the program are sought through the following:

1. Selective admission procedures
2. A curriculum that is interdisciplinary and adaptive to deepening knowledge in a particular subspecialty
3. Continuous evaluation to ascertain achievement level and potential of the student for further development
4. Research opportunities and support
5. Close faculty-student relationships

In general, there are two major roles in the fields of art education, art therapy, and arts administration for which advanced graduate studies have relevance. The first role is that of practitioner in which the art professional concentrates on teaching, supervision, or administration. The second role is one in which it is the task of the art professional to produce historical, philosophical, or scientific theory applicable to art education, art therapy, and arts administration.

The doctoral program may lead to either the doctor of philosophy 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 5046. Theory and Practice I (3). Prerequisite: Admission to the Art Education Teacher Certification Program. Corequisite: ARE 5145. This course includes the theoretical, historical, philosophical, and sociological underpinnings for the development of curriculum for and the practice of art education in both primary and secondary schools. Observation in the public schools is required.

ARE 5047. Theory and Practice II (3). Prerequisites: ARE 5046, 5145. Corequisite: ARE 4550C. In this course, students develop an understanding of the concepts needed for teaching studio, art history, art criticism and aesthetics, and develop the skills for developing curriculum in these areas for both elementary and secondary schools. Observation in the public schools is required.

ARE 5145. Human Development and Learning in Art (3). Prerequisite: Admission to the Art Education Teacher Certification Program. Corequisite: ARE 5046. This course provides a theoretical foundation for understanding what children know and learn through artistic inquiry and expression. The course emphasizes practical application of this knowledge to curriculum development and lesson planning. Observation in the public schools is required.

ARE 5245. Curriculum and Programs (3). Exploration and development of curricular and/or program development in the arts in formal and informal educational settings.

ARE 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 5295. Art Museum Education (3). Prerequisite: ARE 5258. Building on a base established in the prerequisite course ARE 5258 Museum Education, this course addresses education in the art museum context.

ARE 5304. Art in Childhood Education (3). A theoretical examination of the elementary art program; study of significant literature and research in the field; and inquiry into methods and materials.

ARE 5382. Introduction to Counseling for Art Therapists (3). Prerequisite: Permission of instructor. This course examines the uniqueness of artistic expression in therapy. Implications for practical applications are presented for varying therapeutic needs. Methods of interactions with clients are explored with emphasis on building rapport, establishing trust, facilitating communication, initiating problem solving, and implementing termination of treatment.

ARE 5458. Computer Graphics in Art Education (3). Prerequisite: Admission into the Art Education Teacher Certification Program. This course is an introduction to computer functions for preservice art teachers. The primary emphases are on the development of visual technological literacy through practice and adaptation of computer processes, including the use of graphic software and Web site design for teaching and learning in art.

ARE 5460. Therapeutic Use of Art Materials (3). Prerequisite: Permission of instructor. This course is designed to give students fundamentals of how art materials are used therapeutically in educational, community, and clinical settings. Included in the course is a survey using art materials as a means of growth and discovery.

ARE 5551. Art Therapy and Group Counseling (3). Prerequisite: Permission of instructor. Emphasis in this course is placed on group processes and the unique characteristics that art brings to group work. Group art therapy is examined from a theoretical perspective. Practical application conducting art therapy groups with differing populations is explained.

ARE 5552. Assessments for the Practice of Art Therapy (3). Prerequisite: Permission of instructor. This course emphasizes the use of projective and art-based assessment instruments for the art therapist. Students learn to write reports based on individual assessments and become familiar with medical charting, record keeping, and treatment planning.

ARE 5555. Advanced Art Therapy (3). A survey of art therapy through examination of its history, literature, populations, and professional opportunities.

ARE 5556. Using Personal Symbols in Therapy (3). Prerequisite: Permission of instructor. This course explores the use of visual symbols and metaphors to facilitate communication, problem solving and termination of treatment, and verbal interaction skills. The uniqueness of artistic expression in therapy is examined through experiential and theoretical modes. Implications for practical applications are discussed for various special populations.

ARE 5557. Interpretation of Symbols in Art Therapy (3). Prerequisite: Permission of instructor. Through a therapeutic focus, this course expands the study of the interpretation of symbols through the exploration of psychological frameworks, social contexts, and etiological and developmental references. The study of defense mechanisms (or coping styles) and ethical issues related to symbolic art expression through interpretation and practice related to client art is explored. Instructional format is varied with lectures, discussions, case studies, and art experiences illuminating theoretical and practical applications of the significance of art symbols.

ARE 5640. Ethics and Professional Issues (3). Prerequisite: Permission of instructor. Course content incorporates the code of ethical responsibility of the American Art Therapy Association. This code addresses the responsibility, competence, qualifications, standards, continuing education, confidentiality, client welfare, use of client expressions, and professional relations in art therapy. Current issues related to the national certification exam and licensure of art therapists in Florida provide insight for professional development.

ARE 5641. Critical Analysis (3). Critical appraisal of historical, philosophical, and contemporary trends and issues in the arts and art education.

ARE 5649. Theories of Art Therapy (3). Prerequisite: Permission of instructor. This course introduces the history of the development of theoretical structures for the practice of art therapy. Content is linked to multiple psychological perspectives including psychoanalytic, analytic, cognitive, and behavioral approaches. Theory and practice are presented through lectures, demonstration tapes, and studio experiences.

ARE 5665. Managing the Arts Organization (3). Consideration of the manager as a leader, individual styles of managing, functions of the manager of the arts and typical problems in the various arts.

ARE 5745. Research Survey (3). Survey of research in teaching, learning, and administration in the arts in formal and informal settings; survey of resources and published studies; proposal and grant writing and evaluation.

ARE 5865. Arts Administration in the Public Sector (3). Arts administration theory based on social context, client services, and comparative studies in the arts: music, visual arts, theatre, dance, literature, and electronic media. Arts support networks and leadership as factors for effective arts administration.

ARE 5906r. Directed Individual Study (1–3). May be repeated to a maximum of nine (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 5934r. Special Topics: Art Therapy Issues (3). Prerequisite: Permission of instructor. The content of this course varies to offer intensive study regarding specific topics relevant to the practice of art therapy. These topics may include but are not limited to: treating sexual abuse, confronting substance abuse, coping with loss, utilizing family systems, and addressing multicultural issues. Please check with the Department of Art Education office for current topic(s). May be repeated to a maximum of six (6) semester hours.

ARE 5935r. Seminar: Current and Comparative Studies in Art Education (3). Exploration of current issues in art education: 1) theory, research, and practice in the field, 2) teaching comprehensive art education. May be repeated to a maximum of fifteen (15) semester hours. May be repeated in the same semester.

ARE 5940. Supervised Teaching (3). (S/U grade only.)

ARE 5940L. Field Studies (1–3). (S/U grade only.) Prerequisite: Permission of instructor. This course introduces practicum experiences in school, community, or clinical settings. These work experiences are supervised by on-site personnel (i.e. art therapists, special educators, psychologists, counselors) and by university faculty with ATR-BC credentials. Supervision, equivalent to ten (10) hours for every one 100 hours of field work, is integral to this practicum. Supervision sessions include discussion of assessment and implementation of client programs and progress, directed readings relevant to site participation, and professional development of the student art therapist.

ARE 5941. Practicum I (3). Prerequisite: Permission of instructor. Practicum experiences in a school, community, or clinical setting comprise the content of this course. These work experiences are supervised by on-site personnel (i.e. art therapists, special educators, psychologists, counselors) and by university faculty with ATR-BC credentials. Supervision, equivalent to ten (10) hours for every 100 hours of field work, is integral to this practicum.

ARE 5942. Practicum II (3). Prerequisite: Permission of instructor. Please refer to ARE 5941 above for course description.

ARE 5943. Practicum III (3). Prerequisite: Permission of instructor. Please refer to ARE 5941 above for course description.

ARE 5944r. Field Laboratory Internship (1–9). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

ARE 5950. Portfolio in Art Education (3). Prerequisites: ARE 4550C, 5046, 5047, 5145, 5147, 5395. Corequisite: ARE 5940. Taken in conjunction with student teaching, students document their progress in mastering the 12 Accomplished Practices by preparing professional portfolios for both the elementary and secondary art teaching levels.

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). (P/F grade only.)

ARE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

ARE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

ARE 8976r. Master's Thesis Defense (0). (P/F grade only.)

ARE 8985r. Dissertation Defense (0). (P/F grade only.)

ART HISTORY:

see also **Asian Studies; Classics**

Department of ART HISTORY

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Chair: Richard K. Emmerson; **Professors:** Emmerson, Gerson, Hahn, Nasgaard, Neuman; **Associate Professors:** Bearor, Freiberg, Weingarden; **Assistant Professors:** Bloom, Flores, Grigor, Jolles, Lee; **Curator:** Hudson; **Professors Emeriti:** Bosch (deceased), Bucher (deceased), Draper, Mason (deceased), Rose, Teilhet-Fisk (deceased); **Courtesy Professors:** de Grummond, Palladino-Craig, Pfaff, Pullen, Stone

The Department of Art History offers programs leading to the master of arts (MA) and the doctor of philosophy (PhD) in the history and criticism of art. The objective is to prepare the student for a professional career either in academic art history or in one of the related professions, including work in museums, commercial galleries, or 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 Asian art, Islamic art, Latin American art, Early Medieval art, Romanesque and Gothic art, Italian and Northern European Renaissance 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, and word-image studies. Members of the classics faculty trained in archaeology and art history offer graduate-level courses in Egyptian, Aegean, Greek, Etruscan, and Roman art.

The Department of Art History is supported by a rich array of resources, including classrooms fully equipped for multimedia presentations and a visual resource center under the direction of two full-time curators. The resource center houses a collection of over 500,000 slides, digital images, videos and pedagogical CDs, and maintains image-based Web sites related to each art history course. The University library holdings are extensive and include a rare book and facsimile collection. The library supports many electronic resources and an excellent interlibrary loan division. The resources of the Ringling Museum Library are also available.

The **University Museum of Fine Arts** houses several permanent collections and is used for temporary exhibitions. Many of these are generated by faculty and students who have also contributed to exhibitions at the **Mary Brogan Museum of Art and Science**, the Tallahassee City Museum. The University administers the **Ringling Museum** in Sarasota, with its internationally-known collection of European and Asian art. Internships are available at each of the Florida State University's museums.

Students have the opportunity to pursue independent research at the Florida State University Study Centers in **Florence, London, 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. The London Study Center offers opportunities for teaching assistantships and for internships at major London museums. The Paris program,

in the process of development, hosts faculty and art history classes. Archaeological experience is available at the Etruscan and Roman sites of Cetamura del Chianti and Poggio delle Civitelle at San Venanzo, the University's field school excavations in Italy.

The department sponsors an annual **Symposium in the History of Art** for graduate students attending universities nationwide. Students are chosen to present papers during a two-day series of meetings, and these papers may be submitted for publication in *Athanos*, a journal for graduate students in art history sponsored by the Art History Department and the College of Visual Arts, Theatre and Dance. Each year a distinguished art historian is invited to participate in the symposium and to deliver the keynote address.

Financial Assistance. The department offers teaching fellowships for doctoral students and stipends for MA students. Department, college, and university assistantships are available as well, and are based on past record and future potential in the arts professions. Mason Travel Funds and Mason Research and Writing Grants are available at 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 study in the field through course work. The selection is made in consultation with the graduate adviser and with the advice of professors in the student's major field. Applicants who already hold a MA 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:

- 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)
 - One course in methods of art history (ARH 5813)
 - One course in World arts (Asian, Islamic, Latin American, African, Oceanic, and Native American art)
 - Three courses in the student's major field
 - One elective chosen from courses inside or outside the department, to be determined in consultation with the graduate adviser
 - Reading proficiency in one foreign language (usually French or German)
- AND**
- Either six (6) semester hours of supervised research for the thesis, or nine (9) semester hours in art history (see below).

Master of Arts: Thesis

Minimum thirty-three (33) semester hours. For students who intend to continue their studies at the doctoral level, and perhaps go on to university teaching, the department recommends the thesis option. The thesis should demonstrate proficiency in research, writing, and argumentation and must be passed by a committee consisting of faculty from the Art History Department. Six (6) semester hours are awarded for thesis work.

Master of Arts: Course Intensive

Minimum thirty-six (36) semester hours. This option is best suited for students who are interested in pursuing careers in the field that do not require the PhD. In this case, the student will complete the requirements as outlined above, but in place of the six (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 a minimum 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).

1. One course in methods of art history (ARH 5813) if not already taken at FSU
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 adviser. These might be taken in other areas of art history or in other disciplines (courses must be approved by the graduate adviser and are dependent on the major and minor areas of study)

In addition to the above course work, the candidate also must complete the following requirements:

5. Twenty-four (24) semester hours of supervised dissertation research
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 advanced research in a different cultural setting)
8. Satisfactory completion of a doctoral examination concerning material in the major and minor fields
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. Acceptance will be by invitation of the faculty, and will occur between the student's second and third 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 2–9 under sub-section 'Doctor of Philosophy in the History and Criticism of Art' above. In all, this track requires a minimum of sixty (60) semester hours of course work, plus twenty-four (24) semester hours of supervised dissertation research (eighty-four [84] semester hours).

Certificate in Museum Studies

In addition to their MA or PhD degree, graduate students in art history may earn a Certificate in Museum Studies. The museum studies program is interdisciplinary and prepares students for professional work in museums and related institutions. 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 period's accomplishments.

ARH 5174r. Studies in Classical Art and Archaeology (3). Specific studies in aspects of classical art and archaeology.

ARH 5220. Early Christian and Byzantine Art (3). 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 explores the cathedrals (including their sculpture and stained glass) built by bishops and towns, as well as the castles, sumptuous arts, and manuscripts commissioned by princes and lords. Topics of special interest include the Black Death, devotional art, civic expression, and the arts of the courts.

ARH 5321. Early Italian Renaissance Art: 15th Century (3). An examination of how social and historical issues influenced the arts during the first great cultural flowering of the Renaissance in Florence, Rome, and Venice. Discussion will center on how the requirements of the patron, the vitality of local traditions, and the interaction among the arts all contributed to the creation of the new Renaissance vocabulary.

ARH 5322. Later Italian Renaissance Art: 16th Century (3). Course examines works by the great masters of the Renaissance, including Leonardo da Vinci, Michelangelo, and Titian, against the backdrop of the social and political realities of the day. Discussion will include the rise of the artist-hero, the sources and meaning of Mannerism, and the impact of the religious controversies of the age.

ARH 5340. Northern European Renaissance Art (3). Developments in northern European fifteenth and sixteenth century art with emphasis on painting and printmaking: Flemish, French, German, and Dutch artists.

ARH 5360. Southern Baroque Art (3). This course investigates painting, sculpture, and architecture in Italy and Spain during the 17th century, stressing the theatrical, ecstatic, and virtuosic 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 5420. Modern European Art: Neoclassicism through Impressionism (3). Course discusses European art from 1780–1880, concentrating on the evolving dialogue between academic and anti-academic practices through an investigation of the relationship between theory, criticism, and techniques of representation. Topics of inquiry include: David and Neoclassicism; British landscape painting; Delacroix and French Romanticism; Courbet's Realism and Manet's Naturalism; and French Impressionism.

ARH 5445. Modern European Art: Postimpressionism through Surrealism (3). Course covers the development of art from 1880–1940. Topics of discussion include abstraction, symbolism, surrealism, as well as the relationship between the techniques and forms of abstract representation and contemporary philosophical, social, scientific and political events. The writing of artists and critics provide the basis for this inquiry.

ARH 5556. Arts of Japan (3). An introduction to the arts and culture of Japan, focusing on key monuments and artistic traditions that have played a central role in Japanese art and society. It covers, chronologically, the Pre-historic Age, Shinto, Buddhism, Court Culture, Zen Buddhism, Samurai Government, and the Industrial Age.

ARH 5558. Arts of China (3). A survey of the major epochs of Chinese art from prehistoric times to the modern period. The course examines the important artistic traditions developed in China: bronzes, funerary and architectural monuments, painting and calligraphy, Buddhist sculpture, and ceramics.

ARH 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 US art relevant to the period covered and the critical issues driving the field. Theme for the seminar varies.

ARH 5648. Art after 1940 (3). Course covers American and European art from Abstract Expressionism to the present. This course examines the reactions against Abstract Expressionism and investigates late-modernist practices (e.g., Pop Art, Minimalism, Conceptualism, Earth Art, Performance Art). Topics discussed include contemporary artistic practices and the relationship between modernism and postmodernism.

ARH 5725. History of Graphics (3). A survey of artists and processes in western printmaking from woodcut to silk screen.

ARH 5797. Seminar in Museum Studies (3). Theoretical and practical approaches to museum operation and the historical development of the art museum in America.

ARH 5806r. Seminar in the History and Criticism of Art (3). May be repeated to a maximum of nine (9) semester hours.

ARH 5813. Seminar in the Methods of Art History (3). Seminar in methodology required of art history graduate students.

ARH 5838. The Museum Object (3). Prerequisite: 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 5885. Introduction to Appraising Personal Property (4). This course is a basic introduction to appraising personal property. It covers all aspects of proper appraisal procedure and methodology for fine art: painting, drawing, sculpture, prints, ceramics, silver, glass, jewelry, books, etc. This course follows the proper requirements of USPAP and the IRS.

ARH 5886. Uniform Standards for Professional Appraisal Practice (USPAP) (4). This course follows the US Government Uniform Standards of Professional Appraisal Practice as they apply to the Fine Arts.

ARH 5887. Walt Disney and the American Century (3). This course considers the artistic output of Walt Disney and his company in relation to fine art, society and politics during the twentieth century, emphasizing contributions in the realms of film, architecture and the theme park. In an effort to judge Disney's impact on the production and consumption of leisure, students engage with some thirty years of academic critical discourse.

ARH 5907r. Directed Individual Study (1-5). May be repeated to a maximum of nine (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). (P/F grade only.)

ARH 8967r. Master's Comprehensive Examination (0). (P/F grade only.)

ARH 8976r. Master's Thesis Defense (0). (P/F grade only.)

ARH 8985r. Dissertation Defense (0). (P/F grade only.)

ASIAN HISTORY:

see Asian Studies; Classics; History-Asian History

Program in ASIAN STUDIES

COLLEGE OF SOCIAL SCIENCES

Director: Lee Metcalf (Social Science); **Professors:** Bowman (Public Administration and Policy), Kelsay (Religion), Olsen (Music), Singh (History); **Associate Professors:** Bakan (Music), Cuevas (Religion), Erndl (Religion), Garretson (History), Grant (History), Kim (Political Science); **Assistant Professors:** Gaiser (Religion), Lan (Modern Languages and Linguistics), Lee (Art History), Sears (Art History), Yasuhara (Modern Languages); **Visiting Professor:** Koo (Economics); **Visiting Associate Professor:** Lopez (Religion); **Visiting Assistant:** Schlenoff (Modern Languages)

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 farther 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 toward the degree requirements when taken under the appropriate 4000 and 5000 level course numberings.

Note: Descriptions of individual courses can be found under the departmental listings.

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 5358	Environmental Conflict and Economic Development (3)
GEO 5465	Historical Geography (3)
GEO 5472	Political Geography (3)
GEO 5555	World Systems Theory (3)
INR 5014	Contexts and International Relations (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 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).** (P/F grade only.)

ASN 8976r. **Master's Thesis Defense (0).** (P/F grade only.)

ASTRONOMY:

see Physics

BIOCHEMISTRY:

see Biological Science; Chemistry and Biochemistry

Department of BIOLOGICAL SCIENCE

COLLEGE OF ARTS AND SCIENCES

Chair: Timothy S. Moerland; **Associate Chair (Graduate Studies):** Bates; **Associate Chair (Undergraduate Studies):** Reeves; **Associate Chair (Curriculum Development):** Epstein; **Professors:** Abele, Bates, Chase, Ellington, Fajer, Freeman, Gaffney, Gilbert, Herrnkind, Levitan, Meredith, Moerland, Outlaw, Quadagno, Roberts, Roux, Swofford, Taylor, Travis, Tschinkel; **Associate Professors:** Bass, Epstein, Erickson, D. Fadool, J. Fadool, Houle, Hout, L. Keller, T. Keller, Miller, Naylor, Reeves, Ronquist, Stepan, Trombley, Winn; **Assistant Professors:** Beerli, Deng, Hansen, Inouye, Mast, Underwood, Wulff, Yu, Zhu; **Professors Emeriti:** Anderson, Caspar, DeBusk, deKloet, Easton, Elam, Elliott, Friedmann, Heard, Hofer, Homann, James, Livingston, Mariscal, Roeder, Short

The program of graduate study in the Department of Biological Science is designed to transform an individual from student to professional scholar. Awarding of the degree signifies that the individual is qualified to join the community of scholars and is recognized as an authority in the discipline. Our graduates are employed as faculty in colleges and universities or as researchers in industry or government laboratories.

The Department of Biological Science offers graduate programs leading to the degree of master of science 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; evolution; developmental biology; microbiology; virology; immunology; plant and animal physiology; comparative physiology; reproductive physiology, endocrinology, and neuroendocrinology; sensory physiology; plant and animal anatomy; invertebrate zoology; behavioral biology; population biology/genetics; marine biology; plant systematics and taxonomy; tropical biology; ecology and environmental biology. In addition, many of the departmental programs are associated with research and graduate programs of the departments of Oceanography, Chemistry and Biochemistry, and Psychology, as well as with specific advanced-study programs of the 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 four buildings on the Tallahassee campus (Conradi, Biological Science Unit 1, Biomedical Research Facility and Molecular Biophysics) 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 electrophysiological laboratories, an isotope laboratory, photographic laboratories, and spectrophotometric instrumentation, as well as the National High Magnetic Field Laboratory and a supercomputer. Herbarium facilities contain about 175,000 specimens. Vans, cars, and boats are provided for field research.

The Department of Biological Science is a comprehensive basic science department consisting of 45 faculty members. The current faculty members hold contracts and grants totaling millions of dollars. Faculty members are represented on the editorial boards of numerous professional journals and hold a number of national offices in professional societies. 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, a 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 paper-based, 250 on the computer-based, or 100 on the Internet-based Test of English as a Foreign Language (TOEFL). Applicants are required to advise the associate chair of their area(s) of interest so that applications can be circulated to the appropriate faculty members. Students are encouraged to contact individual faculty about the details of their research activities.

Financial Aid

Graduate assistantships (teaching, research, and/or service) are available at approximately \$18,540 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
6. Successful defense of the thesis

Doctoral Degree

The direction and supervision of graduate work at the doctoral level resides primarily with the major professor and supervisory committee. The University requires that the degree be completed within five calendar years from the time the student gains admittance to candidacy by passing the preliminary exam.

Overall requirements for the doctor of philosophy (PhD) degree are as follows:

1. After admission to doctoral candidacy, a minimum of twenty-four (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
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 members hold appointments in the Departments of Biological Science, Psychology, Nutrition, Food and Exercise Sciences, or Biomedical Sciences. Students enroll in the department of their initial faculty adviser/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 or PCB 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 *Graduate Bulletin* and the program in neuroscience Web site at <http://www.neuro.fsu.edu>.

Definition of Prefixes

BCH—Biochemistry (Biophysics)

BOT—Botany

BSC—Biological Science

MCB—Microbiology

PCB—Process Biology

PSB—Psychobiology

ZOO—Zoology

Advanced Undergraduate Courses

Please refer to the *General Bulletin* for full course descriptions.

- 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 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).** (P/F grade only.) A comprehensive examination. Students with a master's degree should take it during the second semester in residence; those without a master's degree should take it during the fourth semester in residence. Passing exam required for admission to doctoral candidacy.

BSC 8976. **Master's Thesis Defense (0).** (P/F grade only.) Oral defense of master's research and thesis. Students should register during the term in which they intend to defend their master's thesis.

BSC 8985r. **Dissertation Defense (0).** (P/F grade only.) Oral defense of dissertation research. One-time registration during the term in which student expects to defend.

Microbiology

- MCB 5408. **Prokaryotic Biology (3).** Prerequisite: PCB 3063 or permission of instructor. This course introduces graduate level general microbiology, including material on prokaryotic cell structure and function, the molecular biology and genetics of microorganisms including viruses, and biotechnological applications of microbial physiology.
 MCB 5505. **Virology (3).** Structure and replication of the bacteriophage, plant and animal viruses, with an emphasis on comparative molecular biology and infectious disease.
 MCB 5936r. **Selected Topics in Microbiology (1–4).** May be repeated to a maximum of sixteen (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 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 5672. **Evolution (3).** Prerequisites: PCB 3063 or equivalent undergraduate course work. This course provides instruction in evolution as a unifying framework for biological science. The course shows how two primary aspects of evolution, shared phylogenetic history and the modification of populations and species, interact to produce the similarities and differences among all organisms.
 PCB 5675. **Advanced Evolutionary Biology (3).** Prerequisites: PCB 3063, 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 5845. **Cell and Molecular Neuroscience (4).** In this course, students are introduced to basic principles of neurophysiology, including intracellular signalling, membrane potentials, synaptic communication, sensory and motor systems and neural development and plasticity.
 PCB 5936r. **Selected Topics in Genetics and Cell Biology (1–4).** May be repeated to a maximum of sixteen (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 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 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

BIOMEDICAL SCIENCES

COLLEGE OF MEDICINE

Chair: David Balkwill; **Professors:** Balkwill, Galasko, Hurt, Klatt, Levitt, McGee, Meredith, Ouimet, Overton, Patrick, Payer, Rill;

Associate Professors: Blaber, Horabin, Olcese, Yu; **Assistant Professors:** Altmann, Gunjan, Kabbaj, Kato, Lee, Stefanovic, VanLandingham, Wang; **Assistant Scholar Scientist:** Bienkiewicz; **Assistants in Medicine:** Cappendijk, Didier, Paik

The Department of Biomedical Sciences is a community of scholars dedicated to educating future physicians and scientists and advancing knowledge through discovery.

The PhD in Biomedical Sciences at the Florida State University College of Medicine is designed to train modern biomedical scientists who use genomics, proteomics, bioinformatics and other contemporary approaches to address questions of developmental, cell and molecular biology related to human health. The program is appropriate for students with majors in biochemistry, biology or other health-related fields. Three broad areas of research are emphasized: development, neuroscience and the molecular basis of human disease. Research rotations during the first year allow students to make an informed choice regarding the research area and major professor with whom they will conduct their PhD work. A core curriculum of the fundamentals, the choice of electives from other departments and intellectual interaction with faculty and postdoctoral fellows encourage graduate students to mature into independent scientists.

Admission Requirements

To apply for the PhD in Biomedical Sciences Program, students should contact the College of Medicine's Office of Research and Graduate Programs at (850) 644-2015 or visit the program's Web site (<http://med.fsu.edu/biomed/phd/contact.asp>) for other contact information. A prospective candidate must 1) have or be a candidate for a Baccalaureate degree from an accredited college or university and be in good standing at the last institution attended, 2) have a minimum GPA of 3.0 (on a 4.0 scale), and 3) have a minimum combined verbal and quantitative score of 1000 or above on the Graduate Record Examinations (GRE). A GRE Subject Test is strongly recommended and may include Biochemistry and Cell Biology, General Biology, Chemistry or Physics. Applicants whose native language is not English and who have not received a degree from an English language institution are required to take the Test of English as a Foreign Language (TOEFL), receiving a minimum score of 600 for the paper test or 233 for the Computer Based Test (CBT). Special admission consideration may be requested for students with disabilities. Applicants must also send all required material to the University Admission Office at <https://admissions.fsu.edu/gradapp/>.

Degree Requirements

The College of Medicine grants the PhD in Biomedical Sciences through an interdisciplinary program with the goal of training students to conduct research in the broad area of the molecular basis of human disease, including the function of the human genome in development, neurobiology, aging, cancer and other disease.

The curriculum for the Biomedical Sciences degree includes core courses in statistics and ethics in research, as well as specialized biomedical course work and laboratory research. The direction and supervision of graduate work at the doctoral level resides primarily with the major professor and supervisory committee, which is comprised of four faculty members. Laboratory rotation in at least three laboratories during the first year is a degree requirement, designed to assist students in making informed choices regarding their courses of study.

To be considered for graduation from the College of Medicine with the PhD in Biomedical Sciences, the student must successfully complete all course requirements within five (5) calendar years from the time the student gains admittance to candidacy by passing the preliminary exam. Other requirements for graduation include attending the Health Science Seminar Series; teaching at least two (2) semesters; successfully completing the preliminary doctoral examination; submitting a doctoral research proposal approved by the major professor and the supervisory committee after admission to doctoral candidacy; registering for a minimum of twenty-four (24) semester hours of dissertation credit; and submitting, publicly presenting and successfully defending a doctoral dissertation.

Additional details are available at <http://www.med.fsu.edu/biomed/phd/default.asp>. Also, for complete details of degree requirements, plus a description of the college, its facilities, opportunities and available financial assistance, refer to the "College of Medicine" chapter of this *Graduate Bulletin*.

Definition of Prefixes

BMS—Basic Medical Sciences

GMS—Graduate Medical Sciences

IHS—Interdisciplinary Health Sciences

Graduate Courses

BMS 5185r. Research Opportunities in Biomedical Sciences (1–4). (S/U grade only.) Prerequisite: Admission to the Biomedical Sciences graduate program. This course provides entering students in the PhD Program in Biomedical Sciences opportunities to be informed of and receive training in research by rotating through the laboratories of several individual faculty members in the department. Students must complete three (3) laboratory rotations. Students should register for two (2) semester hours of credit for each seven (7) week rotation. May be repeated to a maximum of eight (8) semester hours.

BMS 5186c. Research Techniques in Biomedical Sciences (4). Prerequisites: BMS 5525; PCB 5137, 5595. This is an advanced laboratory course for students in the PhD Program in Biomedical Sciences, providing training in laboratory techniques and experimental approaches essential to contemporary molecular biology and biochemistry research.

BMS 5525. Bioregulation (4). Prerequisite: PCB 5595. This is an advanced, lecture-based course emphasizing the molecular basis of regulation in biological systems. An important component is the study of the design and interpretation of experiments leading to understanding of regulation of gene expression. The course relies on contemporary research literature and focuses on specific model organisms and current problems that illustrate experimental approaches used to investigate different aspects of the control of gene expression.

BMS 5905r. Directed Independent Study in Biomedical Sciences (1–12). (S/U grade only.) Prerequisite: Admission to the Biomedical Sciences graduate program. This is an individualized research course intended for students in the PhD Program in Biomedical Sciences prior to passing the Preliminary Doctoral Examination. May be repeated to a maximum of fifty-four (54) semester hours.

BMS 5935r. Advanced Topics in Biomedical Sciences (1–2). (S/U grade only.) Prerequisite: Admission to the Biomedical Sciences graduate program. This is a seminar-based course in which students in the PhD Program in Biomedical Sciences present seminars on current research from the literature on topics developed under the guidance of faculty members. Students critically read, analyze, and present current research. May be repeated to a maximum of eight (8) semester hours.

BMS 6900r. Directed Individual Study in Biomedical and Clinical Sciences (2–9). (S/U grade only.) This course involves supervised individual study on selected topics.

BMS 6936r. Seminar in Biomedical Sciences (1–2). (S/U grade only.) A seminar series in current topics in biomedical sciences. May be repeated to a maximum of sixteen (16) semester hours.

GMS 5905r. Directed Individual Study (1–3). (S/U grade only.) Prerequisite: Consent of instructor. Study on a selected topic as designated by the student or directing professor. May be repeated to a maximum of nine (9) semester hours.

GMS 6001r. Special Topics in Biomedical Sciences (1–3). (S/U grade only.) An expert, lecture-based course with focus on recent advances and outlooks in Biomedical Sciences research. Course offerings include but are not limited to such topics as aging, biotechnology, bioinformatics, developmental biology, genomics and proteomics, molecular signaling, neuroscience, and physiology. The general emphasis is on the molecular, genetic and cell biology aspects of these topics. May be repeated to a maximum of sixteen (16) semester hours.

GMS 6097Cr. Biomedical Sciences Research (3). Laboratory course designed to provide students with individualized instruction in specific experimental strategies and methods important to their chosen specialty area of biomedical research training. May be repeated to a maximum of twelve (12) semester hours.

IHS 5503r. Proposal Development (1). (S/U grade only.) Individualized instruction for graduate students in the College of Medicine in the development of a dissertation proposal or other proposals, including the strategies, process and requirements that meet the standards for written project proposals in medical research. May be repeated to a maximum of two (2) semester hours.

IHS 5515. Ethics and Professional Integrity in Research (1). (S/U grade only.) This is a required course for students in the PhD Program in Biomedical Sciences. This course provides a survey of three broad areas of research ethics: issues raised by using animals in research, using people in research, and by the scientific method itself. The course presents examples of ethical decisions faced in medical research, including ascribing credit for contributions in publications, consequences of plagiarism and fraudulent data, access to genetic data, confidentiality, institutional review boards and considerations in research involving animal or human subjects.

IHS 5905r. Directed Individual Study in Health Sciences (1–12). (S/U grade only.) This is a course for graduate students who desire an individualized research experience in Biomedical Sciences, Medical Humanities and Social Sciences, Public Health or other fields represented in the College of Medicine. Students receive laboratory or other training in research methods and improve their readiness for and appreciation of research in health-related science. May be repeated to a maximum of thirty-six (36) semester hours.

IHS 5906r. Directed Individual Study in Medical Sciences (1–12). (S/U grade only.) This is a course for medical students who desire an individualized research experience in Biomedical Sciences, Medical Humanities and Social Sciences, Public Health or other fields represented in the College of Medicine. Students receive laboratory or other training in research methods and improve their readiness for and appreciation of independent research in health-related science. May be repeated to a maximum of twenty-four (24) semester hours.

IHS 5933. Seminar on Medical Science Education (1). (S/U grade only.) Preparation for supervised teaching and education outreach experiences. Topics include approaches to conduct of classes and laboratories, exam construction, ethics in teaching, legal and safety issues for instructors, and effective written and oral communication.

IHS 5935r. Health Sciences Seminar (1). (S/U grade only.) This is a seminar program for students in the Ph.D. Program in Biomedical Sciences and other health-related programs. Biomedical Sciences students are required to enroll each Fall and Spring semester. May be repeated to a maximum of twelve (12) semester hours.

IHS 5945r. Supervised Teaching (1–5). (S/U grade only.) Students in the Ph.D. Program in Biomedical Sciences are required to register for a minimum of two (2) semester hours before graduation. May be repeated to a maximum of five (5) semester hours.

IHS 6980r. Dissertation Research (1–12). (S/U grade only.) Ph.D. candidates in Biomedical Sciences should register for this course after passing the Preliminary Examination. A minimum of twenty-four (24) dissertation hours is required for graduation.

IHS 8960r. Preliminary Doctoral Examination (0). (P/F grade only.) Oral examination and defense of the doctoral proposal; successful completion allows advancement of the student to Ph.D. candidacy.

IHS 8970r. Dissertation Defense (0). (P/F grade only.) Oral defense of dissertation research. One-time registration during the term in which the student expects to defend their Ph.D. dissertation.

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 (SCS), 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 and Biomedical 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: chem@eng.fsu.edu; Web site: www.eng.fsu.edu/cheme.*

Research Facilities

The Department of Chemical and Biomedical Engineering has extensive graduate research laboratory facilities located in the present College of Engineering building. Three undergraduate teaching laboratories, a design classroom, and twelve graduate research laboratories comprise the current physical resources. All laboratories are well equipped with modern experimental apparatus including numerous workstations and microcomputers for data acquisition and analysis. These facilities include laboratories dedicated to polymer science and engineering, electrochemical engineering, 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 much additional support equipment.

In the area of computing capabilities, the department has numerous personal computers interconnected to the college's 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 Sciences (SCS) 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 dedicated to various areas of biomedical engineering. 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 a chemical engineer is to analyze, develop, design, control, construct, and/or supervise chemical processes in research and development, pilot-scale operations, and industrial production. Emphasis is placed on the application of computer analysis to problems encountered in the above areas. Chemical

Department of CHEMICAL AND BIOMEDICAL ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Chair: Bruce R. Locke; **Professors:** Alamo, Collier, Locke, Palanki; **Associate Professors:** Chella, Kalu, Ma, Telotte; **Assistant Professors:** K. Chen, Grant, Kostov, Ramekrishan, Shanbhag; **Adjunct Professor:** Schreiber; **Research Associate:** Finney; **Affiliate Faculty:** Chase, C.J. Chen, Chin, Kwon, Sachdeva, Wesson

The Department of Chemical and Biomedical 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. Eleven 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,

engineers are employed in the manufacture of inorganic chemicals (i.e., acids, alkalis, pigments, and fertilizers), organic chemicals (i.e., petrochemicals, polymers, fuels, propellants, pharmaceuticals, and specialty chemicals), biological products (i.e., enzymes, vaccines, biochemicals, biofuels), foods, semiconductors, and paper.

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 1200 on the verbal and quantitative portions of the GRE
4. International students: an undergraduate GPA of 3.3 or higher, a minimum combined score of 1200 on the verbal and quantitative portions of the GRE exam. In addition, students whose native language is not English are required to take the TOEFL exam and get a score of at least 213

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
4. Registration and attendance at all departmental seminars

No course with a grade below "C-" will be counted toward fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted toward fulfillment of degree requirements. The 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
3. Registration and attendance at all departmental seminars

No course with a grade below "C-" will be counted toward fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted toward fulfillment of degree requirements.

Note: Departmental support is generally not available for students pursuing a non-thesis master's degree.

Required Courses (twelve [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 at least twenty-four (24) semester hours of dissertation research
7. Presentation and defense of an original dissertation
8. One semester teaching assistantship in the undergraduate laboratory

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: 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 bioengineering, biotechnology, and related professions.

The graduate program in biomedical engineering (BME) promotes a special emphasis in cellular and tissue 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 requires thirty (30) semester hours for completion, the non-thesis MS degree requires thirty-three (33) semester hours, and the PhD requires a total of fifty-four (54) 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 1200 on the verbal and quantitative portions of the GRE
4. International students: an undergraduate GPA of 3.3 or higher and a minimum combined score of 1200 on the verbal and quantitative portions of the GRE. In addition, students whose native language is not English are required to take the TOEFL exam and get a score of at least 213

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 3301, Introduction to Process Analysis and Design for Chemical Engineers, or MAP 3305, Engineering Mathematics I; ECH 3266, Introductory Transport Phenomena; and ECH 4267, Advanced Transport Phenomena. In addition, students should have taken the following courses (if not included in their degree program): Biological Sciences I and II and Biochemistry I and II. An undergraduate course in anatomy and physiology is desirable but not required.

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
4. Registration and attendance at all departmental seminars

No courses with a grade below "C-" will be counted toward fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted toward fulfillment of degree requirements. The candidate must also complete and defend an original thesis.

Required Courses (eighteen [18] semester hours):

BME 5030 Biochemical Transport Phenomena (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

BME 5937r Special Topics in Biomedical Engineering [Cellular Engineering] (3)

ECH 5052 Research Methods in Chemical Engineering (3)

ECH 5840 Advanced Chemical Engineering Mathematics I (3)

Biomedical Engineering Electives

Choose **one** of six (three [3] semester hours):

BME 5020 Biophysical Chemistry and Biothermodynamics (3)

BME 5105 Biomaterials (3)

BME 5500 Biomedical Instrumentation (3)

BME 5937 Special Topics in Biomedical Engineering [Mathematical Physiology] (3)

BME 6330 Tissue Engineering (3)

BME 6530 NMR and MRI Methods in Biology and Medicine (3)

Other elective courses taught by the College of Medicine and the Department of Biological Sciences may be found in their respective chapters of this *Graduate Bulletin*.

Thesis Hours (nine [9] semester hours):

BME 5971r Thesis (1-9)

In addition to the thirty (30) semester hours of course work and thesis, an oral examination in defense of the thesis is required for the master's of science in biomedical engineering thesis option.

Course (non-thesis) Option (thirty-three [33] 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. Fifteen (15) semester hours of approved electives
3. Registration and attendance at all departmental seminars

No courses with a grade below “C—” will be counted toward fulfillment of degree requirements. No more than one course with a grade in the “C” range will be counted toward fulfillment of degree requirements.

Note: Departmental support is generally not available for students pursuing a non-thesis master’s degree.

Required Courses (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

BME 5937 Special Topics in Biomedical Engineering [Cellular Engineering] (3)

ECH 5052 Research Methods in Chemical Engineering (3)

ECH 5840 Advanced Chemical Engineering Mathematics I (3)

Elective Courses (fifteen [15] semester hours):

BME 5020 Biophysical Chemistry and Biothermodynamics (3)

BME 5105 Biomaterials (3)

BME 5500 Biomedical Instrumentation (3)

BME 5937 Special Topics in Biomedical Engineering [Mathematical Physiology] (3)

BME 6330 Tissue Engineering (3)

BME 6530 NMR and MRI Methods in Biology and Medicine (3)

Other elective courses taught by the College of Medicine and the Department of Biological Sciences may be found in their respective chapters of this *Graduate Bulletin*.

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 BME 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 thesis-type master’s degree in biomedical 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 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.

Fifty-four (54) semester hours are required for the PhD degree in Biomedical Engineering, as follows:

1. Eighteen (18) semester hours of biomedical engineering core courses
2. Twelve (12) semester hours of approved electives
3. Twenty-four (24) semester hours of BME 6980r, Dissertation
4. Registration and attendance at all departmental seminars

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

BME 5937r Special Topics in Biomedical Engineering [Cellular Engineering] (3)

ECH 5052 Research Methods in Chemical Engineering (3)

ECH 5840 Advanced Chemical Engineering Mathematics I (3)

Elective Courses (twelve [12] semester hours)

Typical biomedical engineering elective courses:

BME 5020 Biophysical Chemistry and Biothermodynamics (3)

BME 5105 Biomaterials (3)

BME 5500 Biomedical Instrumentation (3)

BME 5937 Special Topics in Biomedical Engineering [Mathematical Physiology] (3)

BME 6330 Tissue Engineering (3)

BME 6530 NMR and MRI Methods in Biology and Medicine (3)

Other elective courses taught by the College of Medicine and the Department of Biological Sciences may be found in their respective chapters of this *Graduate Bulletin*.

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 (2) 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. Submission and defense of a prospectus on the dissertation topic to the supervisory committee
4. Completion of a minimum of thirty (30) semester hours of advanced course work in biomedical engineering and related disciplines
5. Satisfaction of University residency requirements
6. Completion of at least twenty-four (24) semester hours of dissertation research
7. Presentation and defense of an original dissertation
8. Assistance in the teaching of at least one laboratory course
9. 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 Engineering Seminar, every semester.

Selection of Major Professor

All full-time graduate students following the thesis option are required to select a research topic and major professor by the end of the first term in which they enter the department. A form for this purpose is available. The completed form should be submitted to the departmental graduate coordinator.

The major professor is responsible for directing the student’s research and progress toward a degree. Once a major professor has been approved, a supervisory committee should be established and a program of study prepared in consultation with the major professor before the end of the second term.

Supervisory Committee

The supervisory committee for a master's degree candidate must consist of a minimum of three faculty members with master's directive status. The major professor is the chair of the supervisory committee and must be a faculty member from the Department of Chemical and Biomedical Engineering. At least one other member of the committee must be from the Department of Chemical and Biomedical Engineering; the third member of the committee should be from outside the department. Additional members may be appointed to the committee if deemed desirable by the major professor.

The supervisory committee for a doctoral candidate must have four members (including major professor) with doctoral directive status. The major professor is the chair of the supervisory committee and must be a faculty member from the Department of Chemical and Biomedical Engineering. Two of the remaining members of the committee must be from the Department of Chemical and Biomedical Engineering, and the fourth member must be from outside the department. Additional members may be appointed if deemed desirable.

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 toward 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 masters 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 are primarily 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. They may be supported on research grants after this period.

Assistantship Duties

Graduate student support is generally in the form of research or teaching assistantships (RAs or TAs), although University fellowships

are also available. Research assistantships generally do not require the performance of any work beyond the research requirements of the degree. However, research assistants who receive departmental support for tuition waivers may be required to 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 Prefixes

BME—Biomedical Engineering

ECH—Engineering: Chemical

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 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 5620. 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 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 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 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). (P/F grade only.) 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). (P/F 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). (P/F 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 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 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 multivariate 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 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, Fourier series, Integral (Fourier and Laplace) transforms, boundary value problems.

ECH 5841. Advanced Chemical Engineering Mathematics II (3). Prerequisite: ECH 5840. Advanced mathematical techniques for chemical engineering applications presented within a unified framework of operator-theoretic methods. Green's functions solution of partial differential equations, regular and singular perturbation techniques, boundary value problems, and boundary-element and finite-element techniques.

ECH 5852. Advanced Chemical Engineering Computations (3). Prerequisites: ECH 5841. Presentation of the central concepts of practical numerical analysis techniques and their application to chemical engineering problems. Includes interpolation and approximation theory, solution of linear and nonlinear systems, solution of ordinary differential and partial differential equations, single step and multi-step methods, stiff systems, and two-point boundary problems.

ECH 5905r. Directed Individual Study (1-3). Prerequisite: 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 toward degree requirements. A minimum of six (6) semester hours is required.

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 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). (P/F grade only.) All doctoral students must enroll in this course the semester they intend to take the qualifying exam.

ECH 8976. Thesis Defense (0). (P/F grade only.) Prerequisites: ECH 5126, 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). (P/F grade only.) Corequisite: ECH 6980r. Must be included in the final semester schedule for all doctoral students.

Program in CHEMICAL PHYSICS

COLLEGE OF ARTS AND SCIENCES

Chair: S.A. Safron; **Professors:** Dalal, Dougherty, Fulton, Manousakis, Marshall, Rikvold, Safron, Van Winkle, von Molnar; **Associate Professors:** Alabugin, Cao, Fischer, Hilinski, Lind; **Assistant Professors:** Nymeyer, Steinbock, Xiang, 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 (SCS)** has as part of its mission the development of computational methods which will be applicable to problems in a wide variety of areas. Some members of the chemical physics program are associated with SCS; 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 SCS. Additional research facilities have also become available at the new National High Magnetic Field Laboratory.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Admission Requirements

Students with acceptable chemistry or physics undergraduate degrees and Graduate Record Examinations (GRE) scores can be admitted into the program after having been accepted by either the chemistry or physics departments. Alternatively, students with an appropriate undergraduate record and acceptable GRE scores can enter directly into the chemical physics program. Depending on how they enter the program, new students should prepare themselves for one of three qualifying examinations: physics, chemistry, or chemical physics.

In the case of the departmental qualifying procedure (diagnostic examinations, followed by evaluation of 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, kinetics, and quantum mechanics/spectroscopy. Normally, the student begins taking the cumulative exams at the start of the second year and continues until six are passed or 16 are attempted. In addition, the student must complete satisfactorily (earning a "B" or better) senior-level electricity and magnetism courses (PHY 4323–4324 or their equivalent) and one special topics in physics course (PHY 6938r) approved by the student's supervisory committee. The physical chemistry cumulative exams are based in part on the courses CHM 5440, 5460, 5461, 5480, 5481, and 5585

Option B. The student may take and pass the written comprehensive examination in physics which covers graduate-level mechanics, statistical mechanics, electrodynamics, and quantum mechanics. In addition, the student must pass (earning a "B" or better) thermodynamics and statistical mechanics (CHM 5460 or the equivalent), one other graduate-level physical chemistry course, and one special topics in physics (PHY 6938r) approved by the student's supervisory committee.

The form of the examination proposed above is designed to make optimum use of the student's background while emphasizing the fundamental unity of the program.

The oral portion of the comprehensive examination shall emphasize the area of the student's proposed research, but the student will also be expected to be familiar with basic concepts in chemical physics.

2. Students will be required to present at least **one seminar** in the regular physical chemistry–chemical physics seminar series during their period of study for the master's or doctoral degree.
3. The **supervisory committee** shall consist of a) the major professor who will be a member of the chemical physics faculty, b) three additional members of the chemical physics faculty (not all from the same area), and c) a graduate faculty representative not from the chemical physics faculty.

Definition of Prefix

PHY—Physics

Graduate Courses for Chemical Physics Majors

PHY 5971r.	Thesis (3–6). (S/U grade only.) A minimum of six (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:** Bruschweiler, Cooper, Cross, Dalal, Dorsey, Dougherty, Fulton, Gilmer, Holton, Krafft, Kroto, Marshall, Safron, Saltiel, Schlenoff; **Associate Professors:** Alabugin, Fischer, Goldsby, Greenbaum, Hilinski, Li, Logan, Sang, Steinbock, Stiegman, Strouse; **Assistant Professors:** Dudley, Latturmer, Miller, Nymeyer, Roper, Striegel, Yang, Zakarian, Zhu; **University Professor:** Kasha; **Coordinator of General Chemistry Laboratories:** Dillon; **Coordinator of Organic Chemistry Laboratories:** Kearley; **Professors Emeriti:** Choppin, Clark, DeTar, Herz, Johnsen, Light, Linder, Mellon, Rhodes, Schwartz, Sheline, Vickers; **Professor Emerita:** Hoffman

The graduate program in chemistry and biochemistry at Florida State University began in 1949. From this relatively recent beginning, the department developed rapidly to a position of prominence in the Southeast and has gained international recognition for the quality of the graduate education it offers. The department offers programs leading to the master of science and doctor of philosophy degrees in analytical, inorganic, organic, physical, materials, 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**, **The Center for Materials Research and 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. In addition, construction is currently underway on a new 168,000 square foot Chemistry building, scheduled for completion in 2007. 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 **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), **Varian Inova500 Widebore Spectrometer**, a solid state spectrometer with a variety of probes, and 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. 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. Other major instrumentation available in the department includes 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. Faculty members have been widely recognized for their achievements, and count among their ranks a Nobel Laureate, members in the National Academy of Sciences, The Royal Danish Academy of Sciences, the Brazilian Academy of Sciences, and the American Academy of Arts and Sciences. Faculty members have been recipients of the American Chemical Society 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 Web site 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 several programs in the department—analytical, biochemistry, inorganic, materials, organic, or physical—as an area of specialization. Requirements for course work and exams differ among the programs. Performance of original research is a primary characteristic of the thesis MS and PhD programs, and programs of study are correspondingly highly individualized. The course MS program is more rigidly structured. A handbook of information for graduate students, including specific departmental and program requirements for each degree program, is available from the student affairs office of the Department of Chemistry and Biochemistry and on the Web site.

All graduate students in the department must participate in teaching activities at some time during their graduate careers. To prepare students to meet this requirement, the department offers a course in chemical education (CHM 5945) 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 program areas 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 program area in which they will concentrate and a 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, materials and physical programs, 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 ¹³C 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, voltammetry, 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 physicochemical 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 sufficient introductory material in polymer synthesis to relate structure and properties.

CHM 6190r. Analytical Chemistry Seminar (1). May be repeated to a maximum of six (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 5866r-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. Cross-listed 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. Cross-listed 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 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. Cross-listed 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. Cross-listed 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 5910-5912. 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 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 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). (P/F grade only.)

CHM 8969r. Preliminary Doctoral Examination (0). (P/F grade only.)

CHM 8976r. Master's Thesis Defense (0). (P/F grade only.)

CHM 8985r. Dissertation Defense (0). (P/F grade only.)

**CHILD DEVELOPMENT:
see Family and Child Sciences**

Department of CHILDHOOD EDUCATION, READING, AND DISABILITY SERVICES

COLLEGE OF EDUCATION

Interim Chair: Mary Frances Hanline; **Professors:** English, Flake, Palmer, Wolfgang; **Associate Professors:** Burkhead, Clark, Ebener, Edwards, Hanline, Jones, Lake, Lewis, Menchetti, Piazza, Rice; **Assistant Professors:** Al Otaiba, Connor, Delano, Fiske, Lundeen; **Assistants in Elementary Education:** Davis (Panama City), Harrel, Nicolas, Rios (Panama City); **Associate in Elementary Education:** Floyd; **Visiting Assistant Professor:** Fesmire; **Professors Emeriti:** Green, Kirby, Lynch-Brown, Mills, Oseroff, Schluck, Scott, Scott-Simmons, Tait; **Courtesy Instructor:** L. Jones

There are five major areas of specialization in the Department of Childhood Education, Reading, and Disability Services: early childhood education, elementary education, reading and language arts education, special education and rehabilitation counseling services.

The Department of Childhood Education, Reading, and Disability Services is committed to high-quality personnel preparation programs, service to the state of Florida, and research in elementary education, early childhood education, reading/language arts, special education, rehabilitation counseling services, and related areas. The Department strives to provide programs of excellence serving undergraduates, graduates, and advanced graduates by teaching, advising, and providing professional role models. Our goal is to prepare educational and rehabilitation leaders who will contribute to the betterment of a pluralistic, global society in the context of the state of Florida's needs for an educated, global-minded citizenry.

The mission is accomplished by:

- implementing personnel preparation programs that are comprehensive and that prepare practitioners to implement state-of-the-art research-based practices
- conducting high-quality research in authentic settings
- translating research to practice through service to the profession at the local, state, and national levels

Program requirements for state-approved educator preparation programs are subject to revision based on changes in Section 1004.04, Florida Statutes, Public Accountability and State Approval for 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 Childhood Education, Reading, and Disability Services:

Early childhood education
Education of students with exceptionalities
Elementary education
Reading education and language arts

EARLY CHILDHOOD EDUCATION

Professor: Wolfgang; **Associate Professors:** Jones, 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, practicum, and directed research. A minor is suggested in the areas of psychology, sociology, anthropology, child development, or related fields.

Master's Degree

Admissions

Admission to the master 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 baccalaureate degree from an approved institution; 2) submission of a transcript including a grade point average of 3.0 or better in the last two years of undergraduate study; 3) submission of a minimum combined verbal and quantitative score of 1000 on the Graduate Record Examination (GRE); and 4) three letters of recommendation.

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 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; 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 Prefixes

EDG—Education: General

EEC—Education: Early Childhood

Graduate Courses

EDG 5208. Foundations of Teaching (3). This course is for master's students seeking alternative or regular certification who do not have an undergraduate degree in a teaching field. This course provides the essential elements needed to succeed in a classroom.

EDG 5246. Moral Education (3). This course is designed for masters and doctoral students to expose and discuss controversial topics related to moral education. Course topics include hate crimes, racial issues, gun control, character-values-moral education, and tolerance. This class examines historical, theoretical, and practical issues and applications pertaining to moral education.

EEC 5263. Thematic Curriculum and Direct Instruction for Young Children (3). One of three courses designed to provide theory/research bases for the development of curriculum and practices for educating children ages 3 years to grade 3. This course focuses on thematic curriculum and direct instruction.

EEC 5269. Curriculum and Play for Young Children (3). One of a three-course series designed to provide theory/research bases for the development of appropriate curriculum and practices for educating children ages 3 years to grade 3. This course focuses on active learning through play.

EEC 5305. Methods and Experiences with Young Children and Families (3). Provides direct experiences in working with young children and families and requires seminar attendance and field placement with young children.

EEC 5405. Teachers and Parents: Partners in Education (3). Effects of parental involvement on children's educational development and achievements; designing/implementing strategies for enhancing parent-teacher partnership in education.

EEC 5525. Children's Centers (3). Investigate the basic principles involved in establishing and operating centers for the young child.

EEC 5605. Techniques of Classroom Management and Child Study (3). Identifies and analyzes theories, programs, and essential components in classroom management. Explores techniques for classroom teachers to use in developing a child study with emphasis on educational implications.

- EEC 5615. Issues and Trends in Early Childhood Education (3).** Identifies issues and trends in the area of early childhood education and addresses possible causes and relationships.
- EEC 5665. Historical and Theoretical Bases of Early Childhood Education (3).** This course compares, analyzes, and synthesizes the different philosophical and psychological theories that form the foundation of early childhood education programs and practices. It also studies the historical events that influenced the direction and nature of the care and education of young children.
- EEC 5671. Research in Early Childhood Education (3).** Comprehensively investigates the field through surveying, delineating, searching, and synthesizing research in early childhood education.
- EEC 5906r. Directed Individual Study (1–3).** (S/U grade only.) May be repeated to a maximum of twelve (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 5944. Student Teaching in Early Childhood Education (6–10).** (S/U grade only.)
- EEC 5947. Field Laboratory Internship (1–8).** (S/U grade only.)
- EEC 5971r. Thesis (1–6).** (S/U grade only.) A minimum of six (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 ensure 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).** (P/F grade only.)
- EEC 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- EEC 8968r. Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- EEC 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- EEC 8978r. Specialist in Education Thesis Defense (0).** (P/F grade only.)
- EEC 8985r. Dissertation Defense (0).** (P/F grade only.)

ELEMENTARY EDUCATION

Professor: Flake; **Associate Professors:** Clark, Rice; **Assistant Professors:** Fiske, Lundeen; **Visiting Assistant Professor:** Fesmire (Panama City); **Service Professor:** Hansen; **Assistants in Elementary Education:** Davis (Panama City), Herrell, Rios (Panama City); **Associate in Elementary Education:** Floyd

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 K 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. Three faculty members reside 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 K–6 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 between fifty-one (51) and fifty-four (54) 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 Prefixes

CGS—Computer General Studies

EDE—Education: Elementary

EDS—Education: Supervision

MAE—Mathematics Education

SCE—Science Education

SSE—Social Studies Education

Graduate Courses

CGS 5112. Using Computer Graphics as an Instructional Tool (3). Prerequisites: CGS 2160, MAS 2103; Corequisite: COP 3001 or 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 5327. Differentiating Instruction (3). This course is for students seeking alternatives to regular certification. The course provides the essential elements needed to differentiate instruction for diverse learners. Topics include flexible grouping, instructional and curricular accommodations, using assessment to inform instruction and implementing tiers of intervention.

EDE 5346. Technology in Elementary and Middle School (3). Prerequisite: Graduate standing or 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). (P/F grade only.)

EDE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

EDE 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EDE 8976r. Master's Thesis Defense (0). (P/F grade only.)

EDE 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

EDE 8985r. Dissertation Defense (0). (P/F grade only.)

EDS 5356. Supervision of Associate Teaching (3). (S/U grade only.) Function of public schools in teacher education programs, basic knowledge and skills needed by classroom teachers to become effective supervising teachers. Emphasis given to the Florida Performance Measurement System/Beginning Teacher Program. Practical laboratory experience included.

MAE 5318. The Topics and Teaching of Elementary School Mathematics (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.

SCE 5215. Conceptual Learning in Elementary School Science (3). Provides opportunities to acquire knowledge and skills related to planning and implementing a science program for elementary school children.

SSE 5615. Problems in Teaching Elementary School Social Studies (3). The identification of problems, their investigation, and application of findings to instruction.

READING AND LANGUAGE ARTS

Professors: Foorman, Palmer; **Associate Professor:** Piazza; **Assistant**

Professor: Conner

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 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 Degree

The specialist degree is designed to meet advanced certification requirements and to prepare individuals for leadership roles in reading and language arts programs. Students who pursue a specialist degree

choose from the same curricular options as those in the master's program but combine these courses with others available in the College and University. Students aspiring to be reading and language arts specialists study current theory and research and ways of applying this knowledge in clinical or field-based projects, public schools, community literacy programs, and state departments of education. Each program of study is tailored to the student's experience and professional aims. As part of this program, the student may elect to write a thesis or complete six (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 policy-making. 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 integrating the language processes of listening, speaking, reading, and writing in the classroom setting. Digital storytelling (technology integration) strategies will be included.

LAE 5415. **Investigation in Children's Literature (3).** Review of the various areas of children's literature, recent trends in children's books, and research related to curriculum, reading interests, student's responses to literature, and development of taste in literature. Literature appropriate for children from birth to age 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).** (P/F grade only.)

RED 8966r. **Master's Comprehensive Examination (0).** (P/F grade only.)

RED 8968r. **Specialist in Education Comprehensive Examination (0).** (P/F grade only.)

RED 8976r. **Master's Thesis Defense (0).** (P/F grade only.)

RED 8978r. **Specialist in Education Thesis Defense (0).** (P/F grade only.)

RED 8985r. **Dissertation Defense (0).** (P/F grade only.)

SPECIAL EDUCATION

Associate Professors: Edwards, Hanline, Lewis, Menchetti; **Assistant Professors:** Al Otaiba, Delano; **Assistant in Special Education:**

Nicholas; **Courtesy Instructor:** L. Jones

The purpose of the special education graduate program is to prepare professionals to respond to the unique needs of children, youth, and adults with disabilities. The programs offer master's degrees in the areas

of emotional disturbances/learning disabilities, mental disabilities, and visual disabilities; a non-categorical education specialist (EdS) degree; and doctoral degrees in special education (PhD or EdD).

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 programs in Special Education:

Emotional disturbance/learning disabilities
Mental disabilities
Special education
Visual disabilities
Certificate in Early Childhood/Special Education
Certificate in Early Childhood and Family Intervention

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.

It is possible to emphasize the following with elective course work in special education:

Autism
Early childhood special education
High incidence disabilities
Severe or profound disabilities
Technology in special education
Transition and community inclusion

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.

Admission Requirements for Special Education

Applicants must meet University and College of Education admission requirements, submit three letters of recommendation, and be interviewed by program faculty.

Specialist in Education Program (EdS)—Special Education

The specialist in education is an advanced master's degree with admission requirements identical to the master's degree. 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.

Definition of Prefixes

EED—Education: Emotional Disorders
EEX—Education: Exceptional Child-Core Competencies
EGI—Education: Gifted
ELD—Education: Specific Learning Disabilities
EMR—Education: Mental Retardation
EPH—Education: Physical and Multiple Handicapped
EVI—Education: Visually Impaired-Blind
IDS—Interdisciplinary Studies

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 5087. Middle and Secondary Curriculum for Learners with Disabilities (3). This course assists participants to develop curricular planning skills for middle and high school students with disabilities. Emphasis is placed on evidence-based instructional strategies.

EEX 5089. Adaptations and Accommodations for Learners with Disabilities (3). This course provides information regarding adaptations and supports that enhance the education of children and youth with learning and behavior challenges. Emphasis is placed on procedures that adapt the general education curriculum.

EEX 5234. Development and Assessment of Individuals with Severe Disabilities (3). This course provides participants with the knowledge necessary to understand the effects of severe disabilities (severe/profound disabilities, autism, dual sensory impairments) on development and learning and the skills needed to assess individuals with severe disabilities.

EEX 5235. Instructional Environments: Ethical, Legal, Safety, and Classroom Management Considerations (3). This course is designed to provide participants with the knowledge and skills necessary to organize the physical, social, and instructional environment of a classroom that includes a heterogeneous group of learners.

EEX 5237. Methods for Teaching Students with Low Incidence Disabilities (3). This course offers an overview of curriculum and instructional needs of students with low incidence disabilities.

EEX 5245. Introduction to Special Education Technology (3). Prerequisite: EEX 2010. Introduction to ways technology (computers) is used with special education students.

EEX 5246. Mathematics for Students with Disabilities (3). This course equips teachers to address the needs of learners with high incidence disabilities in grades K-12 when teaching mathematics skills. Methods and techniques learned are appropriate for a variety of classroom settings.

EEX 5248. Positive Behavior Support (3). This course provides participants with the knowledge and skills necessary to develop, implement, and evaluate the impact of positive behavior supports in keeping with the Individuals with Disabilities Education Act of 1997.

EEX 5256. Literacy for Learners with Disabilities (3). This course introduces the major reading components of scientifically-based reading research as applied to learners with disabilities: phonological awareness, phonics, fluency, vocabulary, and comprehension. Additional topics include models of typical and atypical reading development and principles and practices of differentiated instruction.

EEX 5258. Advanced Reading Instruction for Students with Disabilities (3). 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 5298. Teaching Students with Autism (3). This course provides class participants with the knowledge needed to develop effective communication, social, and language assessment and intervention for individuals with autism spectrum disorder.

- EEX 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 5704. Early Childhood and Elementary Education Curriculum for Special Educators (3).** This course provides special educators with knowledge of general early childhood and elementary curriculum. Emphasis is placed on evidence-based supports, modifications, and accommodations to allow the child with disabilities to access the general education curriculum.
- EEX 5708. Teaming with Families, Schools and Community (3).** This course provides students with the knowledge and skills to collaborate and team with professionals from a variety of disciplines in the schools and other community agencies, to include family members in the collaboration process, and to support families of children with disabilities throughout the life cycle.
- EEX 5740. Cognitive and Social Implications of Maltreatment of Students with Exceptional Needs (3).** This course focuses on the topic of child maltreatment and its impact on students with disabilities.
- EEX 5774. Collaborative Transition and Career Planning for Students with Severe or Profound Disabilities (3).** This course teaches the planning and implementation of appropriate transition services for students with severe and profound disabilities in the schools at the secondary and post-secondary levels.
- EEX 5836. Practicum with Students with Autism Spectrum Disorder (1-3).** This course provides participants with experience developing, implementing, and assessing intervention programs for learners identified as having autism spectrum disorder. May be repeated to a maximum of three (3) semester hours.
- EEX 5841r. Field Laboratory Internship (1-12).** (S/U grade only.) A practicum course covering specific areas of in-depth field experiences in special education. May be repeated to a maximum of twelve (12) semester hours. Offered fall and spring semesters only.
- 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).** (P/F grade only.)
- EEX 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- EEX 8968r. Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- EEX 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- EEX 8978r. Specialist in Education Thesis Defense (0).** (P/F grade only.)
- EEX 8985r. Dissertation Defense (0).** (P/F grade only.)
- 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 (3).** This course provides experience in developing, implementing and evaluating individualized educational programs for learners identified as having severe mental disability.
- EVI 5019. Foundations of Rehabilitation Teaching of the Blind (3).** This course presents an overview of the rehabilitation teaching profession and provides practical experience in the basic procedures of rehabilitation teaching. Students develop and apply assessment tools, training plans, and evaluation instruments within an andragogical model.
- EVI 5131. Teaching Deaf-Blind/Multisensory Impaired Individuals (3).** Skills and knowledge to teach deaf-blind/multisensory impaired individuals.
- EVI 5221. Applied Methods in Orientation and Mobility (1).** This course explores the methods and strategies for teaching independent travel techniques to students/clients with visual impairments. Students participate in a field experience observing an orientation and mobility instructor working with individuals with visual disabilities. Methods, strategies, and information related to the teaching of independent travel skills are presented and discussed.
- EVI 5222. Advanced Orientation and Mobility Procedures (5).** Prerequisite: EVI 4220. A study of methods in general navigation and environmental awareness relating to severe vision needs. Travel techniques are gained while working under simulated conditions. Pre-cane and cane techniques, residential travel, and navigating semi-business and business districts are among the skills practiced under blindfolded simulation. Permission from instructors is required. For 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 communication needs of individuals with low vision, in order to work with them more effectively.
- EVI 5316. Low Vision (3).** Prerequisite: EVI 4121 or equivalent. The purpose of this course is to prepare prospective teachers of students with low visual impairments, orientation and mobility specialists, and rehabilitation teachers for facilitating the visual functioning of individuals with low vision. Students learn the basics of optics and how to conduct functional vision evaluations, to modify environments, and to teach the effective use of low vision devices.
- EVI 5318. Special Methods of Working with Preschoolers with Visual Impairments (3).** Prerequisites: EVI 4011, 4121. Participants in this course develop the knowledge and skills necessary to effectively provide intervention services to the families of infants, toddlers and preschoolers with visual impairments. Activities center on conducting assessments, working with families, and designing and implementing interventions.
- EVI 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 5355. Issues of Blindness in Society (3).** The purpose of this course is to examine the many issues related to being blind in a society predicated on the presumption that people can use vision to manage societal demands. The losses unique to visual impairment are explored and students are provided instructional strategies to assist individuals in living with visual impairment in a world designed for sighted people.
- EVI 5931r. Seminar in Visual Disabilities (3).** Current topics in the field of visual disabilities. May be repeated to a maximum of six (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.
- EVI 5942. Student Teaching in Visual Disabilities (12).** (S/U grade only.) Prerequisite: EVI 4230 or equivalent. Student teachers teach students with visual disabilities for one semester within a public school or residential school setting, full-time and under supervision of an experienced and certified teacher of students with visual impairments.
- EVI 5943. Practicum in Orientation and Mobility (2).** Prerequisite: EVI 4220, 5222. This course provides students in the program of Orientation and Mobility with fieldwork experience observing and teaching students/clients with visual disabilities. Practicum students are exposed to a wide range of teaching experiences under the direct supervision of an experienced O & M instructor. To facilitate the learning process, the student is provided an opportunity to observe and teach in different areas, including a variety of simple as well as advanced O & M skills, with a variety of students/clients.
- EVI 5944. Practicum with Students Who are Deafblind (1-3).** Prerequisite: EVI 5131. This course provides participants with experiences with learners identified as having dual sensory disabilities or deafblindness. The practicum provides experiences in developing, implementing and evaluating individualized educational programs, as well as experiences working with a team of professionals, paraprofessionals and family members/guardians. May be repeated to a maximum of three (3) semester hours.
- IDS 5347. Infant and Toddler Typical and Atypical Development (3).** This course provides participants with knowledge of typical and atypical development from birth to 3 years of age, with particular attention paid to the impact of disabilities and risk factors on development.
- IDS 5348. Family-Centered Early Intervention (3).** This course provides participants with the skills to collaboratively develop, implement, and assess family-centered early intervention services that are provided within natural environments.
- IDS 5349. Infant/Toddler and Family Assessment (3).** This course provides participants with knowledge of the processes of assessing infant and toddler development and family functioning in order to develop meaningful intervention programs within natural environments.

Rehabilitation Counseling Services (MS)

The master's degree in rehabilitation counseling services 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 services is generally accepted in states that currently have counselor licensure laws. However, the completion of two to three years of appropriate supervised post-graduate clinical experience is required. Additional 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 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, Florida State University, Tallahassee, FL 32306-4458.*

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 development, 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 administrators, administrators in public and private agencies, organizational consultants and trainers, researchers, evaluators and planners of human service programs.

Definition of Prefixes

MHS—Mental Health Services

RCS—Rehabilitation Counseling Services

Graduate Courses

MHS 5801r. Practicum in Counseling and Rehabilitation (4). Students receive intermediate training in counseling in the human services center, through direct client counseling, role play, instruction, and observation. May be repeated to a maximum of sixteen (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 5800. Medical Aspects of Disability (3). Introduction to structure of medicine in the U.S., survey of medical specialties 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, consultative, 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.

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

Department Chair: Kamal S. Tawfiq; **Professors:** Nnaji, Ping, Tawfig, Wekezer; **Associate Professors:** Abdel Razig, Abdullah, Abichou, Chan-Hilton, Huang, Leszczynska, Mtenga, Mussa, Sobanjo, Spainhour; **Assistant Professors:** Chen, Rambo-Roddenberry; **Emeritus Professors:** Dzurik.

The department offers a master of science (MS) and a doctor of philosophy (PhD) program with concentrations in structural, geotechnical, traffic and transportation, construction, water resources and environmental engineering. Special areas of emphasis in civil engineering are bridge design, bridge management systems, construction management, coastal construction, structural stability, and structural reliability; geo-environment, pavements, and soil dynamics; transportation networks and multimodal system; and computer-aided design and decision support 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 Environmental Engineering are geotechnical, environmental, hydraulic, pavement, construction materials, structures, and the traffic automation and innovation laboratory (TRAIL).

Geotechnical laboratory facilities include equipment for soil classification, compaction, hydraulic conductivity, slurry evaluation, shear strength, and compressibility of soils. Electronic data acquisition systems, personal computers, sampling devices, and a machine shop are also available for student use.

The environmental engineering laboratories include both an undergraduate teaching lab and a graduate research lab. The facilities include equipment and instrumentation needed for physical 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 system.

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 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 post-processing. This advanced computing environment is available primarily to graduate students working as research assistants with departmental faculty. The department also has a Sun Ultra-10 workstation that is used for environmental engineering research.

The college computers are connected to a high-speed, switched, fiber-optic LAN and to the Internet via the Florida State University connection to the NSF v BNS network. Desktop computers are supported by a cluster of Sun, DEC, and SGI servers. Other computation resources include the School of Computational Science (SCS), FSU Academic Computing and Network Services (ACNS), and FAMU Computing Services.

A small collection of reference works and heavily used books and journals is located in the College of Engineering Reading Room/ Library Services.

Students may also participate in engineering clubs such as the National Society of Black Engineers (NSBE); Society of Women Engineers (SWE); American Society of Civil Engineering (ASCE); and the Engineering Honor Society, Tau Beta Pi; Engineers Without Borders (EWB); and the Society of Hispanic Professional Engineers (SHPE).

Master's Admission Requirements

Admission requirements for the MS program include the following:

1. A baccalaureate degree in civil engineering, or an allied academic discipline, from an accredited college or university. International students must have a 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 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)
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
7. If feasible, 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 non-thesis 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 student 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 adviser 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 successful 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 by this time, a professor approved by the graduate committee chair will act as the student's academic adviser. The major professor is formally appointed by the department chair and will serve as chair of the supervisory committee. The supervisory committee is formally appointed by the department chair at the request of the major professor. There must be a minimum of 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 depth area, nine to eighteen (9–18) semester hours beyond the master's degree in supplementary electives, up to nine (0–9) 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
Depth area	9	9
Supplementary electives	9–18	9–18
Minor courses	0–9	0–9
Dissertation	24	24
Graduate Seminar	0	0
	—	—
Total credit hours for the 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 toward 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 student who fails re-examination is dismissed from the program. Upon successful completion of the second trial the student may continue to register for dissertation hours.

The most important element of the doctoral program is original and fundamental research resulting in a doctoral dissertation. The research problem is selected by the student in consultation with the major professor and the student's doctoral supervisory committee. The dissertation must be completed on a topic approved by the Committee. To be acceptable, it must comprise original research constituting a significant contribution to knowledge and represent a substantial scholarly effort on the part of the student. The defense of the dissertation will be oral. The doctoral supervisory committee and other members of the faculty as appointed by the academic dean or specified by the university regulations will conduct the examination. Publication of the dissertation shall conform to the regulations of the university through which the student is registered.

Applicants holding degrees in areas other than civil engineering, or closely allied fields, will be required to take 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 Web site to learn more about individual faculty research. The department chairman should be contacted about prospects of teaching assistantships. For other financial and scholarship opportunities, contact the FAMU financial aid office at (850) 599-3730, or online at <http://www.famu.edu/admreg/finaid/>. To access the status of your financial aid information, please contact FSU at (850) 644-0539 or on the Web at <http://finaid.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

ENV—Engineering: Environmental

TTE—Transportation Engineering

Graduate Courses

Construction Engineering

CCE 5035. Construction Planning and Scheduling (3). Prerequisite: CCE 4004. Planning, basic arrow diagramming, basic precedence diagramming, establishing activity duration, scheduling computations, bar charts, project controls, overlapping networks, resource leveling, and program evaluation review technique (PERT).

CCE 5036. Project Controls in Construction (3). Prerequisite: CCE 4004; EGN 3443. Construction cost estimation, work breakdown structure, and cost control; critical path method (CPM) scheduling, resource-constrained scheduling, and integrated scheduling-cost control; probabilistic scheduling techniques, and linear scheduling techniques; contract specifications, and contract claims (schedule impact) analysis.

Geotechnical Engineering

CEG 5015. Advanced Soil Mechanics (3). Prerequisite: CEG 3011. Mechanical behavior, internal stresses, and stability analysis of noncohesive soils, compressibility, consolidation, and settlement of cohesive soils, analytical techniques for predicting earth movement.

CEG 5115. Foundation Engineering (3). Prerequisite: CEG 3011. Design of spread footings, pole and caisson foundations, retaining structures and waterfront structures. Investigation of slope stability.

CEG 5127. Highway and Airport Pavement Design (3). Prerequisite: CEG 4801. Analysis of materials used for highway and runway pavements; design of rigid and flexible pavements and sub-bases for highways and airports; geotechnical considerations.

CEG 5705. Environmental Geotechnics (3). Prerequisite: CEG 3011. The geotechnical aspects of waste containment and storage. Aspects of design, construction, and performance of earthen structures for storing or disposing waste or remediating contaminated sites.

Structural Engineering

CES 5105. Advanced Mechanics of Materials (3). Prerequisites: CES 3100; 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 structural 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 pre-stressed concrete structures. Beam design for flexure and shear, loss of prestress. Design of slabs and axially loaded members, pre-cast 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 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 5030. Applied Environmental Engineering Microbiology (3). Prerequisite: ENV 4001 or equivalent. This course focuses on the survey of environmentally important microbes and the roles they play in environmental restoration processes. Major topics include basics of microbiology, stoichiometry and bacterial energetics, bioremediation and other environmental microbiology applications, and detoxification of hazardous chemicals.

ENV 5045. Environmental Systems Analysis (3). 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. Analysis of various measures of environmental quality. Impacts on different types of resources. Benefit-cost in environment impact assessment.

Transportation and Traffic Engineering

TTE 5205. Traffic Engineering (3). Prerequisite: TTE 3004 or equivalent. Nature, characteristics, and theories of traffic flow. Street and highway traffic problems. Traffic survey procedures. Origin-destination studies. Theory and design of automatic control of traffic systems. Transit systems.

TTE 5206. Advanced Traffic Flow Analysis (3). Prerequisite: TTE 3004. Course covers microscopic and macroscopic characteristics, traffic stream models, demand-supply analysis, shockwave analysis, queueing analysis, computer simulation models, intelligent transportation systems.

TTE 5256. Traffic Operations (3). Prerequisite: TTE 3004. Course covers principles of capacity, freeways, rural highways, urban streets, transportation systems, and computer simulation.

TTE 5270. Intelligent Transportation Systems (3). Prerequisite: TTE 3004. Course covers advanced traffic management systems (ATMS), advanced traveler information systems (ATIS), advanced vehicle control systems, commercial vehicle operations, rural ITS human factors, institutional issues, architecture and standards, simulation and modeling.

TTE 5805. Highway Geometric Design (3). Prerequisites: CEG 2202, 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 5310. Engineering Data Systems (3). Conceptual data modeling; application and use of relational database management systems and geographical information systems; introduction to modern conceptual tools (genetic algorithms, neural networks, etc.); completion of individual projects applying course knowledge to sub-disciplines within the civil engineering program, according to student interest.

CGN 5905r. Directed Individual Study (1-6). (S/U grade only.) May be repeated to a maximum of six (6) semester hours when topics change.

CGN 5910r. Supervised Research (1-5). (S/U grade only.) May be repeated to a maximum 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 toward 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 non-thesis option in civil engineering. This course provides a means of registering for master's project work. May be repeated twice; will focus on research, design, or evaluation of a relevant civil engineering problem.

CGN 6942. Supervised Teaching (3). (S/U grade only.) Prerequisite: Doctoral candidate status. Students receive credit for teaching an undergraduate course under supervision of graduate faculty. PhD candidacy required.

CGN 6972. Master's Thesis Defense (0). (P/F grade only.) Prerequisite: CGN 5971. Required of students enrolled in the master's thesis option. Students must register in the semester they plan to defend their thesis.

CGN 6980r. Dissertation (1-24). (S/U grade only.) Prerequisite: doctoral candidate status. A dissertation representing twenty-four (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 toward completion. May be repeated as often as approved by the supervisory committee. A maximum of twenty-four (24) semester hours may be applied toward the PhD degree.

CGN 8985r. Dissertation Defense (0). (P/F grade only.) Prerequisite: doctoral candidate status. Must be included in the final semester schedule for all doctoral students. May be repeated once.

CGN 8988r. Doctoral Preliminary Exam (0). (P/F grade only.) All doctoral students must enroll in the course the semester they intend to take the qualifying exam. May be repeated once.

**CIVIL ENGINEERING/CONSTRUCTION/STRUCTURES/
GEOTECHNICAL/ENVIRONMENTAL/HYDRAULIC
AND WATER RESOURCES/TRAFFIC AND
TRANSPORTATION:
see Civil and Environmental Engineering
CLASSICAL AND ANCIENT STUDIES:
see Classics; History**

Department of CLASSICS

COLLEGE OF ARTS AND SCIENCES

Chair: Daniel J. Pullen; **Professors:** Cairns, de Grummond, Marincola, Pullen, Tatum; **Associate Professors:** Fulkerson, Pfaff, Sickinger; **Assistant Professors:** Luke, Slaveva-Griffin, Stone, Stover; **Emeritus Faculty:** Golden, Plescia; **Visiting Professor:** Rutherford

The Department of Classics is committed to advancing our knowledge and critical appreciation of the ancient Mediterranean world through excellence in research and in teaching. The department seeks to create an atmosphere that fosters traditional scholarly approaches to the classical past while at the same time welcoming and encouraging innovative methods and perspectives. The department values the interdisciplinary nature of the classics and strives to achieve an integrated understanding of the ancient world that includes a full appreciation of history, literature, and material culture. Students are encouraged to view the classics within the context of the traditional humanities as well as in terms of the contemporary criticism of received cultural canons.

The faculty in Classics is distinguished in teaching and research. Several members of the faculty have received university and national teaching awards. Research strengths lie in ancient literary criticism, the archaeology of Greece and Italy, and the political and social history of Athens and of Rome. The department administers the Langford Family Eminent Chair in Classics, which brings distinguished classicists to campus, and it plays host to two major conferences each year, the Langford Seminar in the fall and the Langford Conference in the spring. It also welcomes distinguished classicists from the U.S. and abroad to its lecture program, which includes the endowed Hunter Lecture. The department's Thompson Library houses a full collection of Classics resources for students and faculty, and graduate students have access to up-to-date computing facilities and software. Graduate students can

participate in the department's excavations at Cetamura del Chianti in Italy, while other opportunities for fieldwork and overseas study are available in both Italy and Greece.

The department enjoys a close relationship with other departments in the University, especially art history, anthropology, 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.

The Department of Classics offers several programs of graduate study leading to the MA and PhD degrees. MA programs are offered in Classical Archaeology, Classical Civilizations, Classics (Greek and Latin), Greek, and Latin. The focus of each program differs, but all are designed to prepare students for teaching careers in secondary schools or to help students develop the skills necessary for study at the PhD level. Students also have the opportunity to work toward certification in Museum Studies. The PhD program has concentrations in Classical Archaeology or Classical Philology and trains students to become teachers and scholars at the college or university level. Students work closely with the director of graduate studies and departmental faculty to design a graduate program which meets their personal and professional requirements.

Admission Requirements

The 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 and a minimum of 1100 on the aptitude test of the Graduate Record Examination (GRE)
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 consult the special requirements below)
2. A GRE score of not less than 1200 (with not less than 600 on the verbal section)
3. A 3.5 GPA in previous graduate level course work.

The minimal admissions requirements for admission to the doctoral program for a student holding only a BA degree are:

1. A 3.6 GPA overall and 3.8 GPA in upper division course work
2. A GRE score of at least 1300, with a verbal score of at least 650
3. Sufficient language skills in Greek and Latin to begin graduate-level course work (normally two years each of college-level Greek and Latin with average grades of at least A-)
4. Well-developed writing abilities

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.

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.

All students pursuing the thesis option for a degree are expected, before arranging their comprehensive or translation exams or commencing work on a thesis, to select a major professor. The major professor will help the student to select his or her MA committee, will direct the student's thesis 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. 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, as well as with the Classics Graduate Student Handbook available on the Department of Classics Web site (<http://www.fsu.edu/~classics>).

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 (Thirty-two [32] semester hours total)

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

Required Courses	Required Hours
CLA 5936	1
CLA 5789r	4
Seminars (usually CLA 5799)	6
Archaeology courses	9
Electives in classics	9
Comprehensive examination	0
CLA 5910	3

Requirements for Thesis Option (Thirty-two [32] semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

Required Courses	Required Hours
CLA 5936	1
CLA 5789r	4
Seminars (usually CLA 5799)	6
Archaeology courses	9
Electives in classics	6
CLA 5971r	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.

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.

Master of Arts with a Major in Classics (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 (Thirty-three [33] semester hours total)

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.

Required Courses	Required Hours
CLA 5936	1
Six courses at the 5000 (or 6000) level in Greek or Latin (at least two courses must be taken in each ancient language)	18
One history course	3
One archaeology course	3
Electives in classics	5
Translation examination	0
CLA 5910	3

Requirements for Thesis Option (Thirty-one [31] semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

Required Courses	Required Hours
CLA 5936	1
Six courses at the 5000 (or 6000) level in Greek or Latin (at least two courses must be taken in each ancient language)	18
One history course	3
One archaeology course	3
Translation examination	0
CLA 5971	6
Thesis Defense	0

See below for a description of the translation examinations.

Master of Arts 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 (Thirty-three [33] semester hours total)

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.

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	3
Electives in classics	5
Translation examination	0
CLA 5910	3

Requirements for Thesis Option (Thirty-one [31] semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

Required Courses	Required Hours
CLA 5936	1
Six courses at the 5000 (or 6000) level in Latin	18
One history course	3
One archaeology course	3
Translation examination	0
LNW 5971	6
Thesis Defense	0

See below for a description of the translation examinations.

Master of Arts 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 (Thirty-three [33] semester hours total)

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.

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	3
Electives in classics	8
Translation examination	0
CLA 5910	3

Requirements for Thesis Option (Thirty-one [31] semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

Required Courses	Required Hours
CLA 5936	1
Five courses at the 5000 (or 6000) level in Greek	15

One history course	3
One archaeology course	3
Electives in classics	3
Translation examination	0
GRW 5971	6
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. 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. The department recommends the course option.

Requirements for Course Option (Thirty-three [33] semester hours total)

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.

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	3
Electives in classics	14
CLA 5910	3

Requirements for Thesis Option (Thirty-one [31] semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

Required Courses	Required Hours
CLA 5936	1
Two courses in 1) Greek or Latin or 2) two courses in literature-in translation (or a combination thereof)	6
Two history courses (may be substituted for by taking courses in archaeology, Latin or Greek at the 5000 level)	6
One archaeology course	3
Electives in Classics	9
CLA 5971	6
Thesis Defense	0

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 with sufficient training in classics and who wish to pursue doctoral-level work in the department may apply directly to the PhD program. Students holding the BA, but without sufficient training in classics, should first apply to the MA program. Students entering the MA program may, upon recommendation and review by the faculty, be admitted to the PhD program before completion of the MA.

The PhD requires thirty (30) semester hours of course work beyond the MA, at least twelve (12) semester hours of which must be at the 6000 level. Students should consult the Classics Graduate Student Handbook, available on the Department of Classics Web site (www.fsu.edu/~classics) for details of requirements, annual evaluations, and examinations. Each program requires a series of comprehensive examinations.

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. Students should consult the Classics Graduate Student Handbook, available on the Department of Classics Web site (www.fsu.edu/~classics) for details of requirements, annual evaluations, and examinations. Each program requires a series of comprehensive examinations.

The program in classics requires: reading list examinations in Greek and Latin; demonstration of proficiency, by exam or through course work, in Greek and Roman history; detailed examinations in Greek and Latin literature; a special author examination; a special field or topic examination; an examination in an interdisciplinary topic.

The program in classical archaeology requires: a reading list examination in either Greek or Latin; demonstration of proficiency, by exam or through course work, in Greek and Roman history; examination on a topic in Bronze Age or Greek archaeology; examination on a topic in Etruscan or Roman archaeology; a special field or topic examination; an examination in an interdisciplinary topic.

Doctoral students must complete and successfully defend a dissertation that makes an original contribution to scholarship.

Definition of Prefixes

ARH—Art History

CLA—Classical and Ancient Studies

CLT—Classical Literature in Translation

EUH—European History

FLE—Foreign Language Education

GRE—Classical Greek (Language Study)

GRW—Classical Greek Literature (Writings)

LAT—Latin (Language Study)

LNW—Latin Literature (Writings)

Graduate Courses

ARH 5111. Art and Archaeology of the Bronze Age in the Aegean (3). Analysis of Minoan and Mycenaean art and architecture and of the archaeological evidence for 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 5161. Archaeology of the Late Roman Empire (3). This course comprises a study of Roman art and archaeology from the second to the sixth century CE with emphasis on important sites and monuments.

ARH 5174r. Studies in Classical Art and Archaeology (3). Studies in specific aspects of Greek and Roman art and archaeology. May be repeated to a maximum of six (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 5920r. Classics Colloquium (1–3). (S/U grade only.) A series of lectures and seminars given by FSU faculty and visiting scholars on current research topics in Classics. May be repeated to a maximum of eighteen (18) semester hours.

CLA 5931r. Special Topics in Classics (3–9). This course examines specific aspects of Greco-Roman literature and culture. May be repeated when topics vary to a maximum of nine (9) 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 (1–6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

CLA 6932r. Seminar in Classics (3–12). Research topics dealing with specific aspects of Greco-Roman literature and culture are examined. May be repeated when topics vary to a maximum of twelve (12) semester hours.

CLA 6980r. Dissertation (1–12). (S/U grade only.) Prerequisite: CLA 8964r.

CLA 8961r. Master's Comprehensive Examination (0). (P/F grade only.)

CLA 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

CLA 8976r. Master's Thesis Defense (0). (P/F grade only.)

CLA 8985r. Dissertation Defense (0). (P/F grade only.) Prerequisites: CLA 6980r, 8964r.

CLT 5295r. Studies in Greek Tragedy: Aeschylus, Sophocles, and Euripides (3). Readings and criticism of selected plays from the Greek tragedians in English translation.

CLT 5345. Studies in Greek and Roman Epic (3). Analysis of the principal pieces of epic literature from the classical world read in English translation.

CLT 5379r. Seminar in Ancient Mythology (3). Special study in seminar format of topics in ancient myth and its interpretation. May be repeated to a maximum of six (6) semester hours.

EUH 5407. Hellenistic Greece (3). Study of the Greek world from the death of Socrates (399 B.C.) to the Roman conquest (146 B.C., the sack of Corinth by Mummius).

EUH 5417. The Roman Republic (3). Study of the history of Rome from its foundation (traditionally 753 B.C.) to the fall of the Roman Republic (31 B.C., the Battle of Actium).

EUH 5418. The Roman Empire (3). The Roman Empire from Augustus to Constantine. Emphasis on the evolution from the duarchy of the early empire to the monarchy of the late empire.

FLE 5810. Teaching Classics (3). This course prepares graduate students in classics for their role as teachers of undergraduates in lower-level courses in etymology, classical civilization, myth and Latin.

GRW 5215r. Studies in the Greek Prose Writers (3). Translation, commentary, and interpretation of readings from Greek prose writers. May be repeated to a maximum of six (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 6106. Survey of Greek Literature (3). Prerequisite: One 5000-level course in Greek or permission of instructor. This course assists the student in working through the PhD/MA reading lists, outlines the basic genres of Greek literature in chronological order, and explores the style of its most renowned practitioners. Class sections are normally divided between lectures on Greek literary history and authorial style and the translation of select passages from the assignment. A minimum of two years of college Greek is required, but students who have only had two years should consult with the instructor before registering for the course, as it is reading intensive.

GRW 6930r. Seminar in Greek (3). Prerequisite: CLA 5934. Doctoral-level seminar devoted to a specific text or issue in Greek studies. May be repeated when topics vary to a maximum of twenty-four (24) semester hours.

GRW 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

GRW 8976r. Master's Thesis Defense (0). (P/F 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 6106. Survey of Latin Literature (3). Prerequisite: One 5000-level course in Latin or permission of instructor. This course assists the student in working through the PhD/MA reading lists, outlines the basic genres of Latin poetry in chronological order, and explores the style of its most renowned practitioners. Class session are normally divided between lectures on Latin literary history and authorial style and the translation of select passages from the assignment. A minimum of two years of college Latin is required, but students who have only had two years should consult with the instructor before registering for the course, as it is reading intensive.

LNW 6930r. Seminar in Latin (3). Prerequisite: CLA 5936. Doctoral-level seminar devoted to a specific text or issue in Latin studies. May be repeated when topics vary to a maximum of twenty-four (24) semester hours.

LNW 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

LNW 8976r. Master's Thesis Defense (0). (P/F grade only.)

CLASSICAL LITERATURE IN TRANSLATION: see Classics

CLINICAL PSYCHOLOGY: see Psychology

Institute for COGNITIVE SCIENCES

COLLEGE OF ARTS AND SCIENCES

Acting Director: Michael Kaschak, Department of Psychology

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 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 for Cognitive Sciences, together with a letter of application briefly outlining the student's background and interest in the cognitive science certificate. The course of study then needs the approval of the director.

One course must be taken from each of the five areas below. A "B" average must be maintained, and no grade below 2.0 will be accepted. 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)644-9363, or at *Department of Psychology, 1107 W. Call St. Florida State University, Tallahassee, FL 32306-4301*; e-mail: *kaschak@psy.fsu.edu*.

Area I: Formal Techniques

PHI 4134 Modern Logic I (3)

PHI 5135 Modern Logic I (3)

COT 5540 Logic for Computer Science (3)

PHI 5934r Topics in Philosophy (when approved) (3)

PHI 6935r Seminar in Philosophical Topics (when approved) (3)

CIS 5930r Selected Topics in Computer Science (when approved) (1-3)

*COT 4420 Theory of Computation (3)

*COT 5310 Theory of Automata and Formal Languages (3)

Area II: Cognitive Psychology

*DEP 5165 Developmental Psychology (3)

*EXP 5508 Cognition and Perception (3)

CAP 5615 Artificial Neural Networks (3)

CAP 6616 Autonomous Behavior in Artificial Neural Systems (3) (S/U grade only.)

Area III: Linguistics (Descriptive)

LIN 4040 Introduction to Descriptive Linguistics (3)

LIN 4512 Introduction to Transformational Grammar (3)

LIN 5045 Descriptive Linguistics (3)

LIN 5510 Transformational Grammar (3)

LIN 5772 Computational Linguistics (3)

Area IV: Systems Theory

*COT 4420 Theory of Computation (3)

CAP 5605 Artificial Intelligence (3)

CIS 5930r Selected Topics in Computer Science [when approved] (1-3)

Area V: Philosophical Foundations

PHI 6225r Philosophy of Language (3)

PHI 6306r Epistemology (3)

PHI 6325r Philosophy of Mind (3)

PHI 6935r Seminar in Philosophical Topics [when approved] (3)

Department of COMMUNICATION

COLLEGE OF COMMUNICATION

Chair: Stephen D. McDowell; **Professors:** Eveland, Heald, Korzenny, Mayo, McDowell, Sapolsky; **Associate Professors:** Adams, Arpan, Houck, Jordan, MacNamara, Nudd, Pekurny, Pompper, Raney, Rayburn; **Assistant Professors:** Bunz, Cortese, McClung, Opel, Proffitt; **Associates in Communication:** Lindsay, Solomon, Zeigler; **Assistants in Communication:** Aronoff, Gilmer, Halvorson, Laurents, Rodin; **Associate Scholar/Scientists:** Dubard, Grise; **Professors Emeriti:** King, Minnick, Wotring, Young

The Department of Communication offers graduate programs of study leading to the master of arts (MA), master of science (MS), and doctor of philosophy (PhD) degrees. The student can select from several distinct major areas of emphasis which reflect specialized programs of study pertaining to either professional or academic careers in the communication field. Whether the student is interested in the traditional fields of human and speech communication, in the established discipline of mass communication, or in the emerging areas of interactive and new communication technologies, there are a variety of courses and course sequences available. The department also offers graduate level certificates in the areas of Hispanic Marketing Communication, Project Management, and Digital Video.

Specifically, at the master's level programs of study are offered in communication with an emphasis in integrated marketing communication, mass communication and media and communication studies. A master's program in corporate and public communication is offered at the Panama City, Florida, campus. At the doctoral level, programs of study are available in speech communication and mass communication.

Both thesis and non-thesis master's options are available. Some non-thesis master's programs are professionally oriented and assume the student will not pursue the doctoral degree in communication. Thesis master's programs are often theoretically oriented and prepare the student for doctoral work. Each major specifies entry requirements and degree requirements to meet predetermined educational and professional goals. While each major has its own set and sequence of required courses, every program of study is planned individually with each student so as to ensure flexibility to meet individual student needs. Acceptance into each major is highly competitive and is based on student qualifications.

Faculty Distinctions

The graduate program in communication reflects the varied teaching and research interests of the faculty. Beyond their range of expertise in communication theory and research, faculty members remain united in their dedication to teaching excellence, as demonstrated by the regularity with which they receive teaching commendations and awards. Faculty members from the Department of Communication have been elected and continue to serve as officers in major academic societies and professional associations. Faculty members have been and remain prominent in 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.

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.

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 each semester.

2. **Minimum** criteria to be considered for admission to the master's program include a GPA of 3.0 (on a 4.0 scale) for the last two years of undergraduate work or a Graduate Record Examination (GRE) score (verbal plus quantitative) of at least 1000. 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. Applicants for the doctoral program may be asked to 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 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 of 600 or above. 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 division head, to secure consent of an eligible faculty member to serve as the major professor, and to work with the major professor to form a committee.
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 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. Courses taken at the 4000 level on an S/U basis may not be counted, nor may any work below the 4000 level.

The program of studies must be approved by all committee members, the division head, the department chair, 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 departmental folder. Changes in the program of studies or in the composition of the supervisory committee are accomplished with special forms obtained from the department. The forms are signed by all committee members, the division head, the department chair, 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) 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; 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 non-thesis 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 non-thesis program, the student must complete a minimum of thirty-three (33) semester hours (or thirty-six [36] semester hours with the course work option), 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 non-thesis program is considered a terminal degree (i.e., the student is normally not expected to continue for the doctorate). The supervisory committee may require an oral examination of the project or residency report. Copies of clearance forms are signed and placed in the student's file.

Written comprehensive examinations must be completed at least four weeks prior to the end of the semester. The oral defense is limited to a two-week period following the written portion of the comprehensive examination.

Students must complete requirements for the master's degree within forty-three (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 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 preparation. It is recommended that students consult with this adviser early in the preparation stage and obtain a copy of *Guidelines and Requirements for Electronic Thesis, Treatise, and Dissertation Writers*.
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 an electronic copy. 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 Office of Graduate Studies sends the major professor one electronic copy.

Master's Degree Programs

Master's Degree in Communication with an Emphasis in Integrated Marketing Communication

Career Goals. This program is designed for students interested in careers that merge advertising, public relations, cross-cultural marketing communication, new communication technologies, and applied research. It provides a foundation for students who wish to pursue professional careers in integrated marketing communication, digital marketing communication and Hispanic marketing communication. The program can also lead to advanced graduate studies.

Educational Goals. The student will follow a course of studies providing: 1) basic knowledge of communication theories, with particular emphasis on those that apply to marketing communication, new communication technologies and Hispanic marketing communication; 2) preparation for professional careers in digital media production using new technologies in marketing and/or management roles; 3) development of fundamental proficiencies in applied research; 4) skills in developing

and organizing data/information systems, and facilitating data-based decisions; 5) insights into the coordination of promotional communication, cross-cultural communication initiatives, new technologies and applied research strategies to facilitate organizational and promotional goals; and 6) experience in making formal marketing/management communication presentations.

Areas of Special Knowledge and Skills to be Developed. Depending on career path and specific course of study, the proportion of course work within each of the following will vary: marketing communication techniques, including strategic and performance-based project management, account planning, desktop multimedia applications, and cross-cultural promotions; traditional and new media marketing communication strategies, including advertising and public relations research, marketing communication planning, design, implementation and evaluation; application of research methods to marketing communication, including quasi-experimental and survey design, content analysis, focus groups, database research techniques, and data analysis; digital media applications and digital marketing communication; and computer-mediated communication research skills and tools.

Required Hours. A minimum of thirty-three (33) semester hours are required; thirty-six (36) semester hours are required with a course work-only option. It is possible to complete the program in one academic year, though many students spread the degree requirements across four semesters. Students who have insufficient backgrounds in communication and related subjects at the undergraduate level may be required to take three to nine (3–9) semester hours of letter-graded undergraduate course work as determined by their supervisory committees. These additional hours will not count toward completion of Master's degree requirements.

For specific course requirements, visit the departmental Web site 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 course work 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 may be required with course work-only. Students who have completed insufficient course work in communication at the undergraduate level (e.g., students who did not major in a communication-related area) may be required to take six to twelve (6–12) semester hours of letter-graded, undergraduate course work 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 Web site at <http://www.comm.fsu.edu> or contact the department.

Master's Degree in Communication with an Emphasis in Media and Communication Studies

Career goals. This program is designed for graduate students interested in studying communication interactions in society. Studies may

result in a terminal degree leading to a position in media, a communication-related agency, or other organizations involving political, social, and public sector settings. The program also may serve as preparation for doctoral work in communication, leading to a teaching or research position.

Educational goals. In this master's program, students will be introduced to theory, research methods, historical background, and contemporary social issues pertaining to: 1) human communication, such as interpersonal communication, gender studies, and social interaction, 2) mass media criticism, policy, processes, and effects, and/or 3) political communication, rhetoric, and persuasion

Areas of special knowledge and skills to be developed. By the conclusion of this master's program, students will have knowledge and experience in: applying theory relative to communication studies, rhetoric, and mass communication; using various communication research methods; critically analyzing content and effects of traditional and new media; and identifying key issues in developing tools for analysis of political, public, and advocacy communication campaigns and strategies

Required Hours. Thirty-three (33) semester hours as a minimum are required; thirty-six (36) semester hours may be required with the course work-only option. Students who have completed insufficient course work in communication at the undergraduate level (e.g., students who did not major in a communication-related area) may be required to take six to twelve (6–12) semester hours of letter-graded, undergraduate course work 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 Web site at <http://www.comm.fsu.edu>, or contact the department.

PhD in Communication

Supervisory Committee and Program of Studies

1. A provisional adviser is assigned to the student at the time of acceptance into the program. During the student's first semester in the program, the provisional adviser will assist the student in registering for courses and may be a source of information for the student concerning choice of major professor, cognate area, program of studies, and registration for the second semester.
2. By the midpoint of the second semester, the student must designate a major professor who has consented to serve in that capacity. The major professor will take over the advising duties of the provisional adviser, will be the student's principal adviser in choosing members for the doctoral supervisory committee, and will assist the student in developing a preliminary program of studies. Faculty members holding doctoral directive status (DDS) are eligible to serve as major professors.
3. The doctoral supervisory committee approves the program of studies, reviews and approves any proposed revisions to the program of studies, and designs and evaluates the doctoral preliminary examination.

Members of the committee must be selected by the student prior to end of the student's second semester of enrollment. The members of this committee will be decided by mutual agreement among the student, the major professor, and the prospective committee members. Doctoral supervisory committees have a minimum of four members: three from within the Department of Communication plus one outside member. At least three members must hold DDS. The outside member of the committee must be from a different department at FSU. This outside member serves as the University's representative-at-large who reports directly to the dean of the College and to the dean of the graduate school; accordingly, the outside member must also hold DDS.

4. Early in the student's course work, a proposed program of studies is completed. The program of studies is a document detailing the courses that a student will take in the doctoral program, as well as a timeline for completing those courses. Before the beginning of the third semester of enrollment, the student must submit for approval a program of studies to the doctoral supervisory committee, the director of doctoral studies, the department chair, and the dean of the College of Communication. Additionally, the

student must submit a statement of purpose, detailing the student's major areas of interests, degree completion schedule, and career goals.

At the end of a student's course work but before preliminary exams are taken, the doctoral supervisory committee will meet with the student to complete a final review of the program of studies. All changes will be reviewed and a final, corrected version of the program of studies is signed and sent to the director of doctoral studies for the additional signatures.

The doctoral program often requires seven or eight semesters of full-time course work beyond the Master's degree and at least one year of dissertation work. Students with a Master's degree from a discipline other than communication should expect to spend more time completing the doctoral program.

5. According to University policy, all graduate students are required to earn grades of B- or better in all courses in order for the courses to be counted toward the degree. In addition, a grade point average of at least 3.0 (out of a possible 4.0) must be maintained for all PhD work.
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. Prior to the preliminary examinations, every doctoral student is required to submit an original scholarly paper to an appropriate journal and/or a state, regional, or national convention.
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 progress of all students in the PhD program is reviewed annually at the conclusion of the spring semester by the director of doctoral studies, in consultation with the Doctoral Program Committee or the student's supervisory committee.
11. At the end of course work, students will enroll for and complete COM 8964 Doctoral Preliminary Examination (0 credit hours). The purpose of the preliminary examination is to determine if the student is sufficiently prepared to continue with the original, independent scholarly work required to complete a doctoral dissertation. The preliminary examination may not be taken if the student has one or more incomplete grades pending. Supervisory committees in our department have been given great latitude in determining the nature and content of the exams. The content covered on the exam is determined by the full committee. Typically, the outside member of the committee provides questions covering the cognate area of study. The nature of the exam is likewise determined by the supervisory committee. Regardless of the testing environment(s) selected by the committee, the exam will consist of a minimum of twelve hours of written examination. The committee is given an opportunity to further examine the student's performance through the oral portion of the doctoral preliminary examination. The oral portion of the exam must occur between 7 and 14 calendar days following submission of the written portion to all committee members.
12. Upon satisfactory completion of the preliminary examination the student is admitted to candidacy for the doctoral degree and is eligible to enroll for dissertation credits. Upon a student's admission to candidacy, the role of the doctoral supervising committee shifts to oversight of the student's dissertation process: proposal defense and approval, guidance during dissertation completion, and defense and approval of the dissertation. Given this shift in responsibilities, the student may seek to change

the composition of the doctoral supervising committee. All requirements for the committee's makeup noted above remain in effect (see 3 above).

13. Upon admission to candidacy, the student must register for dissertation credits (COM 6980r) each term in which a substantial amount of work is being done on the dissertation. Students must register for a minimum of twenty-four (24) hours of dissertation credit in their program. The student must carry a minimum of two dissertation credits during every semester in which (s)he is using and requiring university facilities or requires faculty supervision. As noted above, enrollment in COM6980 is not possible until a passing grade is recorded for COM 8964, Doctoral Preliminary Examination.
14. Successful completion of the doctoral preliminary examination 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 dissertation prospectus must be approved by all committee members prior to research or data collection for a dissertation. The purpose of the dissertation prospectus is to provide the committee members with a description of the proposed dissertation study, so they can determine the soundness and feasibility of and the student's preparedness to accomplish the proposed project.
17. With the major professor's approval, the student must enroll in COM 8985, Dissertation Defense (0 semester hours) for the semester in which the dissertation project will be completed and defended. The defense must be scheduled no later than one month prior to the final submission deadline published by the Office of Graduate Studies.
18. The manuscript and final clearance adviser in the Office of Graduate Studies must approve the formatting of the final dissertation. The student should consult with the clearance adviser early in the preparation stage and closely follow the formatting rules set out in the Guidelines and Requirements for Electronic Thesis, Treatise, and Dissertation Writers publication.
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. A draft of the dissertation must be sent to the outside committee member at least four weeks prior to the oral defense. The defense should be scheduled at least two weeks after 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. The Final Term Degree Clearance form provides spaces for certification by all parties concerned that all requirements for the degree have been met. The form must be signed by the major professor, department chair, and dean of the College following the oral defense. The doctoral candidate must submit the form to the manuscript clearance adviser in the Office of Graduate Studies after all signatures have been acquired and by the published final approval deadline. After final approval by the supervisory committee, the student must submit the final manuscript electronically to the manuscript clearance adviser in the Office of Graduate Studies. In addition to the electronic copy of the document, students must submit one original signed signature page, one paper copy of the title page, and several other forms requested by the Office of Graduate Studies. Additionally, as a courtesy, the student should give all

members of the supervisory committee copies of the dissertation. The library sends the major professor one CD-ROM copy of the dissertation as well.

PhD Degree Programs

PhD in Communication

The Department of Communication offers two PhD program emphases: mass communications and speech communication. The general requirements of each are similar. The primary differences between the two emphasis areas are: 1) the nature of the courses taken by the students, 2) the different faculty members traditionally associated with each, and 3) the emphasis area distinction itself, which may be of importance to students based on future career plans.

Note: The two emphasis areas are represented by different administrative codes in FSU records system; so, students should designate their chosen emphasis area during the application process.

Minimum Required Hours: Minimum course requirements are determined by the doctoral supervisory committee in accordance with department and university requirements. Students may receive credit for master's course work approved by their supervisory committee. All programs 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 Web site at <http://www.comm.fsu.edu> or contact the department.

Program Overview

Beginning with a common set of foundational courses, students will encounter a range of philosophical, theoretical, and methodological approaches to communication scholarship. A major goal of the program is for students to gain knowledge of and an appreciation for the complexities and interdependencies within communication inquiry. To that end, students will gain a critical, historical, and theoretical grounding in the broad communication discipline and then will pursue more advanced study through doctoral-level seminars, directed independent studies, and supervised research experiences within one of two subfields: mass communication or speech communication. Students will be actively mentored to present the results of their work at regional and national conferences, culminating in publication in refereed outlets. Additionally, most students will have the opportunity to develop teaching and classroom management skills through our funded assistantship program.

Program Objectives

This program is primarily designed for students who are interested in pursuing academic teaching and research careers within the communication discipline. However, some may choose to use the degree to launch a career in one of the various communication-related industries, research, consultancy, not-for-profit organizations, or governmental affairs. Regardless of the student's chosen career path, the primary objective for all will be to become an independent and original scholar.

The educational goals of the program are to provide students with advanced knowledge of or experience in: 1) communication theory and inquiry; 2) selected extant communication literatures; 3) research methods applicable in either theoretical or applied settings to the study of selected communication texts, processes, audiences, systems, organizations, or effects; 4) research design and data/textual analysis; and 5) teaching undergraduate students at a state-supported university.

Mass Communication

Career Goals: Teach mass communication in a college or university; management position within a communication or research organization; consultant in media, research, or marketing.

Additional Educational Goals: Knowledge of mass communication theories and research; training in research design, statistics, and computing; experience with various methods for basic and applied communication research; study of mass media institutions, their management, regulation, and evolving technologies; opportunity to teach undergraduate communication courses.

Skills to be Developed: Statistics, research design, and 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.

Certificates

The Department of Communication offers graduate level certificates in Hispanic Marketing Communication, Project Management, and Digital Video Production. Contact the department for more information.

Definition of Prefixes

ADV—Advertising

COM—Communication

MMC—Mass Media Communication

RTV—Radio-Television

SED—Speech Education

SPC—Speech Communication

Graduate Courses

ADV 5415. Hispanic Marketing Communication (3). This course prepares professionals to field the increasing number of positions that require marketing expertise to serve the US Hispanic market.

ADV 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.

ADV 5605. Account Planning (3). This course prepares students to connect consumers with advertising and marketing in public relations and other communication fields.

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 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 Web sites based on information presented from readings and the analysis of the possibilities (and limitations) of Web-based communication. Through the study of tools and techniques commonly used to develop Web pages, animation and interactive modules, students complete a Web site as a deliverable.

COM 5340. Historical-Critical Methods of Research (3). Review of historical methods, resources, and critical approaches in communication research.

COM 5401. Analysis of Communication Theory (3). Analyzes the field of communication through the study of key theories of human communication research.

COM 5450. Introduction to Project Management (3). This course covers the processes, tools and techniques for managing projects of any size while preparing students to sit for the Project Management Professional (PMP) certification exam.

COM 5451. Advanced Topics in Project Management (3). This course covers the theories of several important project managers of the late 20th and early 21st centuries, including Edward Deming, Peter Drucker, Thomas Peters, Eli Goldratt, Philip Crosby and others.

COM 5467. System Thinking and Project Management (3). This course provides background and comparisons of strategic planning, and system thinking theories are presented. Project and management issues also are discussed.

COM 5469. Communication Planning and Dispute Resolution (3). Corequisite: COM 4465. Course introduces students to the theory and practice of alternative dispute resolution.

COM 5526. Marketing Communication Management (3). This course addresses the principles and procedures for communications planning for marketing and culminates in the development of an integrated marketing plan for e-business.

COM 5546. Political Communication (3). Course provides students with insight into roots and bases of political communication.

COM 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (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 6403r. 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). (P/F grade only.)

COM 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

COM 8976r. Master's Thesis Defense (0). (P/F grade only.)

COM 8985r. Dissertation Defense (0). (P/F grade only.)

MMC 5305. Comparative Systems of Mass Communication (3). An examination of various international and national mass communication systems and the elements which determine the type of systems currently operating throughout the world.

MMC 5600. Mass Communication Theory and Effects (3). An analysis of historical and current theories of mass communication with an emphasis on media effects.

MMC 6469. The Diffusion of Innovations (3). This course is an examination of various theoretical and practical issues pertaining to communication's roles in the diffusion of innovations.

MMC 6920r. Colloquium in Mass Communication (3). A survey of issues of immediate interest and consequence to the area of mass communication. May be repeated to a maximum of nine (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 5325. Documentary Video Production (3). This course offers instruction in the theory and practice of production of non-fiction documentary video. Students produce a final video product and a research paper after studying the documentary tradition, theory and history.

RTV 5702. Communication Regulation and Policy (3). Course studies laws, regulations and policies for broadcasting, cable, telephone, and computer-communication industries.

RTV 6425r. Advanced Seminar in New Communication Technologies (3-6). A doctoral-level seminar in the use of new communication technologies for information and entertainment. May be repeated to a maximum of six (6) semester hours.

SED 5346. Teaching Oral Communication Courses (3). This seminar examines the critical and practical dimensions of evaluating student's speeches and presentations. Current research and theory on college level instruction is also explored.

SPC 5234. Classical Theories of Rhetoric (3). Students examine the origins of rhetorical theory during the classical period of Greece and Rome. Focus rests on the rhetorical theories of Plato, Aristotle, Cicero, and Quintilian.

SPC 5442. Group Dynamics and Leadership (3). A review of important concepts and research in group process and group leadership.

SPC 5545. Studies in Persuasion (3). Lecture, readings, and discussion of human behavior theories as applied to persuasive communication.

SPC 5614. Criticism of Contemporary Public Address (3). A critical examination of principal speakers to and for the public.

SPC 5635. Rhetoric of Race Relations (3). Criticism of selected speakers and speeches since 1954, studied against a background of social, political, and intellectual issues.

SPC 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: Howard Goldstein; **Professors:** Apel, Bourgeois, Goldstein, La Pointe, Wetherby, Woods; **Associate Professors:** Lasker, Morris; **Assistant Professors:** Scott, Stierwalt, Thomas-Tate; **Associates in Communication Disorders:** Gessner, Hudson, McClung; **Assistants in Communication Disorders:** Justl, Kahn, Nimmons, Snowden; **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-Voice Science Laboratory** has specialized equipment enabling the analysis of duration, intensity, spectral, and fundamental frequency aspects of speech. Instrumentation and procedures for the forensic study of speech enable the detection of signals in noise and speaker identification from recorded speech samples. Computer-interfaced instrumentation is available for measuring vocal intensity and pitch, aeromechanical aspects of voice and resonance, and physiological functioning of respiration and the vocal apparatus. The **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 Language and Literacy Lab provides tests and materials for assessing language and literacy development. Audio-video equipment, computers, and software are available for the development and evaluation of curriculum materials in the lab and in the field. Wireless headphone systems allow multiple instructional lessons to be delivered simultaneously in classrooms in investigations of vocabulary, phonological awareness, and phonics instruction.

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.

Florida State University's **Center for Autism and Related Disabilities** was established in 1993 and is one of seven centers in the state. Over 1,200 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.

The Neurolinguistic-Neurocognitive Research Center is an interdisciplinary laboratory located in the Rehabilitation Center of Tallahassee Memorial HealthCare. A wide array of equipment and software is available to measure cognition and language. A GaitRite system assesses 30 parameters of gait in studies of the effects of cognitive load on posture, gait, and balance. A Biopac system is available for the measurement of a variety of physiological parameters including EEG, EMG, EKG, respiratory, and cardiac function.

For further information about all graduate admission and degree requirements contact: *Academic Program Assistant, Department of Communication Disorders, 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

Florida State University's speech-language pathology educational program is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association. The objective of the program is to educate speech-language pathologists so they function optimally in a variety of clinical and school settings and, if desired, to enable them to pursue the doctoral degree. Learning experiences involve an interaction of classroom instruction, research, and individualized clinical practicum under the close supervision of certified 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 non-thesis 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 Florida State University generally graduate from the program in six academic semesters, which includes a semester of off-campus internship.

Requirements

Students must submit an application to the University and supplemental application materials to 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. Prospective students must apply to the university and pay the university application fee before their file will be reviewed at the department level. Applicants must submit 2 copies of official transcripts from all post-secondary schools attended and official GRE scores from

the Educational Testing Service to the Office of Graduate Admissions. In addition to applying to the university and submitting the required official documents to Graduate Admissions, prospective students **must submit the following items to the department for completed application:** Two written letters of recommendation from undergraduate or graduate instructors and/or professionals in communication disorders or related areas, the Graduate Questionnaire and the Graduate Checklist. All documents can be found online at <http://comm.fsu.edu>. Normally admission is for the fall semester. Applications 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.

Upon acceptance into the doctoral program, the departmental chair will appoint the major professor. The appointment must be mutually agreeable to the student, major professor, and departmental chair. By the end of the first year of the program, the student should invite selected faculty to form a doctoral supervisory committee. The doctoral supervisory committee shall be composed of a minimum of four members, including the major professor, and will serve until the student is advanced to candidacy. Three members must hold doctoral directive status, and one member with this status must be selected from a different department (the Representative at large). Normally, this member represents the student's Collateral Area of Study. At least two members must be from within the Department of Communication Disorders. Students may choose to include up to two members from other departments in light of the interdisciplinary course work taken by students in the department.

The first three to five semesters of enrollment in the program should be devoted to completion of the core requirements. By the end of the first year of the program, the student must present an approved plan of study to fulfill all requirements for the PhD. The plan of study should include **all** graduate-level courses previously completed. The program of study should include a narrative statement of the student's career goals, all graduate level courses previously completed, and all courses that the student is planning on taking to meet the core requirements and additional requirements, as delineated below, as well as a timeline for completion. The doctoral supervisory committee must approve the program of study in writing and may approve any course(s) already completed to apply toward meeting the core requirements. The student is encouraged to ask the major professor for samples of programs of study completed by former students.

Requirements

The doctoral program in Communication Disorders is individualized to meet the student's needs and interests based on his/her career goals. The student must demonstrate knowledge beyond the master's level in three areas:

1. Research Methods (fifteen [15] semester hours)
2. Communication Processes in Normal and/or Disordered Populations (nine [9] semester hours)
3. A Related Specialization area (twelve [12] semester hours)

Students must also meet three additional requirements:

1. The student must demonstrate teaching competencies by taking major responsibility for teaching at least one undergraduate lecture course. The student must enroll in three to five [3-5] semester hours of SPA 5940, Supervised Teaching
2. The student must demonstrate research competencies by participating in different roles in ongoing research of the major professor or more advanced doctoral students and taking major responsibility for initiating a research project. The student must enroll in three to five [3-5] semester hours of SPA 5910, Supervised Research.
3. The student must enroll in the departmental Doctoral Research Colloquium and Doctoral Seminar on Teaching and Supervision (SPA 6804; both are variable credit ranging from 0 to 3 semester hours, repeatable to 12 hours) for a minimum of 2 semester hours each during the Fall and Spring semesters totaling 4 semesters over the first 2 years in the program and before advancing to candidacy.

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 25 hours of writing time and should be completed within five days.

Option 2. The student must produce two sets of written products: (1) two article critiques to evaluate knowledge of research methodology; and (2) a written creative product relevant to the student's major career objective, such as a grant proposal, a research report, or a course design and curriculum. Each written product is meant to assess the student's ability to perform tasks expected of individuals with doctoral degrees in a variety of job settings. The specific requirements must be approved by the committee before initiating the preliminary exam and are expected to be completed within one or two semesters.

Dissertation

Upon advancement to candidacy, the student should begin working on the dissertation. The dissertation is the final requirement for the doctoral degree. A student must be admitted to candidacy at least six months prior to the granting of the doctoral degree. All requirements for the doctoral degree, including filing an approved dissertation, must be completed within five (5) calendar years from the time the student is advanced for candidacy.

Definition of Prefix

SPA—Speech 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 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. Speech Production and Swallowing 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. Acquired Neurolinguistic and Cognitive 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 5256. Developmental Speech Disorders (3). This course is an overview of the developmental disorders that affect children's speech. Topics include cleft lip, palate and other craniofacial anomalies, developmental apraxia of speech and the dysarthrias.

SPA 5305Lr. Measurement and Management of Impaired Hearing (1-3). 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 5401. 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 5403. Language-Learning Disabilities in School-Age Children (3). Prerequisites: LIN 3710, SPA 4400. Strategies for assessment and intervention of conversational, narrative, and meta-linguistic abilities of school-age children and adolescents with language-learning disabilities.

SPA 5432. Autism and Severe Communicative Disabilities (3). Strategies for language and communication assessment and intervention of children, adolescents, and adults with autism and other severe communicative disabilities. Includes functional analysis of challenging behaviors and decision making for the selection of augmentative communication systems.

SPA 5436. Nature of Autism (3). This course provides an overview of the characteristics and etiology of autism spectrum disorders and the basic knowledge needed to develop effective instructional plans and to enhance reading, communication, and social interactions at home, at school, and in the community.

SPA 5460. Foundations of Developmental Communication Disorders (3). Provides an overview of language and phonological impairments. Prepares students to facilitate development in children's language learning systems while taking into account the contextually-based needs of children with developmental communicative disorders.

SPA 5462. 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 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 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 5562. Advanced Seminar in Augmentative and Alternative Communication (1-3). This course focuses on a variety of topics related to AAC assessment, intervention, and clinical research for people with severe communication disorders. Students are encouraged to participate in related research activities in various phases of ongoing projects.

SPA 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. Communication for Persons Deaf and Hard of Hearing (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 5974r. Thesis (1-6). (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 6804. University Academic and Clinical Teaching Colloquium (0-2). (S/U grade only.) This course is designed to provide doctoral students with information and essential skills for teaching in the university environment.

SPA 6805r. Seminar in Clinical Research Methods (3). 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). (P/F grade only.)

SPA 8966. Master's Comprehensive Examination (0). (P/F grade only.)

SPA 8967r. Advanced Master's Comprehensive Examination (0). (P/F grade only.)

SPA 8976. Master's Thesis Defense (0). (P/F grade only.)

SPA 8977r. Advanced Master's Thesis Defense (0). (P/F grade only.)

SPA 8985. Dissertation Defense (0). (P/F grade only.)

COMMUNITY PSYCHOLOGY:
see Psychology

COMPARATIVE POLITICS:
see Asian Studies; Political Science

COMPARATIVE PSYCHOLOGY:
see Psychology

COMPUTATIONAL BIOLOGY:
see Mathematics

COMPUTATIONAL NUMERICAL METHODS:
see Mathematics

**COMPUTER APPLICATIONS CONCEPTS, DESIGN
AND ARCHITECTURE, INFORMATION SYSTEMS, AND
PROGRAMMING:**
see Computer Science

Program in COMPUTATIONAL SCIENCE

COLLEGE OF ARTS AND SCIENCES

Director: Max D. Gunzburger; **Affiliated Faculty:** Beerli, Naylor (Biological Sciences); Shanbhag (Chemical Engineering); Nymeyer, Yang (Chemistry and Biochemistry); Banks, Gallivan, Van Engelen (Computer Science); Fagherazzi, Ye (Geological Science); Erlebacher, Gunzburger, Hussaini, Navon, Peterson, Tempone, Wang (Mathematics); El-Azab (Mechanical Engineering); Berg, Duke, Rikvold, Zhou (Physics); **Research Associates:** Burkardt, Cheng, Thompson, Wilgenbusch

Program Overview

Over the last few decades, computations have joined theory and experimentation to form the three pillars of scientific discovery and technological design. Many of the important problems facing society can only be solved by teams of individuals from a variety of disciplines. Integral to these teams are computational scientists, who provide the simulation, optimization, and visualization algorithms used to solve problems on computers. Broad, cross-curricular training is crucial to maximizing the effectiveness of the computational scientist. As an interdisciplinary field of study, therefore, the main goal of computational science is the development of computational tools that have applicability over a range of scientific disciplines.

The faculty of Florida State University's **School of Computational Science (SCS)** consists of biochemists, biologists, computer scientists, engineers, geophysicists, mathematicians and physicists, with an even broader spectrum of interests to be represented in the future. These scholars and experts ensure that the school is ideally positioned to offer an innovative graduate program that imparts a synergy between disciplines, thus providing the student with extensive interdisciplinary training.

The graduate programs in computational science at FSU are recent innovations; the MS program began in the fall of 2006, and the PhD track launched in the fall of 2007. For the latest information about the status of programs and new courses, please refer to our Web site at <http://www.scs.fsu.edu>.

Computational Resources

The SCS oversees a large and diverse computing infrastructure in support of research and education. Computing resources include large supercomputers, a number of clusters and computational servers, a laboratory for scientific visualization, a bioinformatics server, and more. To best accommodate research, education, and application development, the SCS maintains a heterogeneous desktop and workstation environment, as well as a state of the art computer classroom. In addition, the **SCS Visualization Laboratory** provides high-powered visualization resources to the FSU community for research, data analysis of large data collections, and education.

Admission Requirements

Note: Please review all University and college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Students considering graduate work in computational science should exhibit a strong desire to develop, analyze and implement computational algorithms. Typically, incoming students will hold a Bachelor's degree in mathematics, computer science, an applied science or engineering, and will be proficient in at least one object-oriented programming language.

An application for admission, application fee, official transcript from each college attended, and a transcript of Graduate Record Examinations (GRE) scores should be sent to the *Office of Admissions, A2500 University Center, Florida State University, Tallahassee, FL 32306-2400*. Note that domestic students may submit an application online.

In addition, the following information should be submitted to Graduate Director, *400 Dirac Science Library, Florida State University, Tallahassee, FL 32306-4120*: 1) a letter of intent that explains the basis for the applicant's pursuit of the degree and his/her experience and

commitment to the field of computational science, 2) a curriculum vitae, and 3) three letters of recommendation from individuals who know the applicant's education and/or professional background. In addition, the applicant should complete the online application for SCS found at our Web site. A student seeking admission to the program should have taken the aptitude test of the Graduate Record Examinations (GRE) within the last three years with a minimum combined score of 1100 (a minimum of 650 on the quantitative aptitude portion). Foreign nationals whose native language is not English must take the TOEFL examination with a minimum score of 550 or the equivalent.

The student should also refer to the SCS Web site or contact the graduate administrator for any revisions to the requirements listed above since publication of this document.

Master's Degree

The MS degree in computational science provides two main tracks for students. The first path is intended for students who are seeking a PhD in computational science and also want to complete the MS requirements. The second path is for students who want a professional master's degree (PSM) and who ultimately seek employment in the non-academic sector.

The goal of both programs is to train students within an interdisciplinary atmosphere. The second option gives students the opportunity to acquire professional skills such as communication or management skills. Hands-on experience through a summer internship allows the professional master's student to integrate material learned through course work with problems of interest to industry and government agencies. The PSM track allows students the option of specializing in computational molecular biology/bioinformatics rather than following a general computational science track.

MS in Computational Science

This degree requires a total of thirty-two (32) semester hours. Required courses are ISC 5305 and ISC 5315 (totaling seven [7] semester hours), a minimum of nine (9) hours from remaining computational science courses with prefix ISC, plus a minimum of six (6) hours from approved courses from existing departments. The remaining ten (10) semester hours must be satisfied through additional approved course work, thesis hours, seminars, etc. In addition, a student must write and defend a thesis or project.

PSM in Computational Science

This degree requires a total of thirty-six (36) semester hours. Required courses are ISC 5305 and ISC 5315 (totaling seven [7] semester hours), a minimum of nine (9) hours from remaining computational science courses with prefix ISC, a minimum of six (6) hours from approved courses from existing departments, six (6) hours of approved professional electives, and an internship. The remaining semester hours must be satisfied through additional approved course work, thesis hours, seminars, etc. In addition, a student must write and defend a project.

Doctoral Degree

The doctoral degree is awarded in recognition of the student's broad knowledge of computational science and the student's ability to do original, independent research in computational science. To complete the requirements for a doctoral degree, the student must 1) complete the requisite course work, 2) satisfactorily complete preliminary examinations for admission to candidacy, 3) choose a major professor and supervisory committee, 4) submit and defend a prospectus to his/her supervisory committee, and 5) complete independent research in computational science culminating in a written dissertation which must be successfully defended to the student's supervisory committee.

The doctoral degree in computational science has several tracks that allow students to specialize in a particular applied science or engineering area. All tracks require the same number of total semester hours and the same core courses. To obtain a specialization in a particular area a student must take a minimum of nine (9) semester hours (approved by his/her supervisory committee) in the area. Current areas of specialization include: atmospheric science, biochemistry, biological science, geological science, materials science, and physics.

Course Work

Required courses are ISC 5305, ISC 5315, ISC 5316, a minimum of nine (9) semester hours from remaining computational science courses with prefix ISC, plus a minimum of nine (9) semester hours from approved courses from existing departments. Additional semester hours can be chosen from other courses, seminars, dissertation credit, etc., approved by the student's supervisory committee to meet the University's minimum course requirement.

Major Professor and Supervisory Committee

The major professor and supervisory committee play a crucial role in guiding the student's training by approving a program of study; setting and administering the student's preliminary examinations, which lead to admission to candidacy; approving the student's prospectus; and certifying that the student is capable of doing original, independent research and communicating this research both in a written and oral fashion. As early as possible, a student should identify an area of research interest and obtain an informal agreement with an SCS faculty member to serve as his/her major adviser. The student and adviser should subsequently establish the student's supervisory committee.

Prospectus

After the student has successfully completed the preliminary examinations and has been admitted to candidacy, the student is required to submit to the supervisory committee a written summary of the proposed research that will comprise his/her dissertation. The prospectus must be successfully defended to the student's supervisory committee.

Dissertation

After completion of the original research proposed in the prospectus, the student must write a dissertation document that must comply with all current University standards for style. The dissertation must be successfully defended to the student's supervisory committee.

Definition of Prefix

ISC—Interdisciplinary Natural Science

Graduate Courses

ISC 5224. Introduction to Bioinformatics (4). Bioinformatics provides a quantitative framework for understanding how the genomic sequence and its variations affect the phenotype. This course is designed for biologists and biochemists seeking to improve quantitative data interpretation skills, and for mathematicians, computer scientists and other quantitative scientists seeking to learn more about computational biology. Laboratory exercises are designed to reinforce the classroom learning.

ISC 5225. Molecular Dynamics: Algorithms and Applications (3). Prerequisites: ISC 5305; MAC 2311, 2312. This course provides a comprehensive introduction to molecular dynamics simulation algorithms and their corresponding applications in molecular science.

ISC 5226. Numerical Methods for Earth and Environmental Sciences (3). Prerequisites: ISC 5305; MAC 2311, 2312. Application of numerical methods to the solution of scientific problems for earth and environmental sciences.

ISC 5227. Survey of Numerical Partial Differential Equations (3). Prerequisite: ISC 5305. This course provides an overview of the most common methods used for numerical partial differential equations. These include techniques such as finite differences, finite volumes, finite elements, discontinuous Galerkin, boundary integral methods, and pseudospectral methods.

ISC 5228. Markov Chain Monte Carlo Simulations (3). Prerequisites: ISC 5305; MAC 2311, 2312. This course covers statistical foundations of Monte Carlo (MC) and Markov Chain Monte Carlo (MCMC) simulations; applications of MC and MCMC simulations, which may range from social sciences to statistical physics models; statistical analysis of autocorrelated MCMC data; and parallel computing for MCMC simulations.

ISC 5305. Scientific Programming (3). Prerequisites: working knowledge of one programming language (C++, Fortran, Java), or consent of instructor. Object-oriented coding in C++, Java, and Fortran 90 with applications to scientific programming. Discussion of class hierarchies, pointers, function and operator overloading and portability. Examples include computational grids and multidimensional arrays.

ISC 5306. Programming Skills for Computational Biology and Bioinformatics (3). This course provides a basic programming background sufficient to begin a career in computational molecular biology and bioinformatics. It is also useful for those who want to develop their own programs for simulation or analysis in ecology, evolutionary biology, genetics, or molecular biology. The Java language is used as a platform for presenting the concepts of data types, structures, flow control, and input/output. Programming assignments are biologically oriented. In addition to Java, scripting languages such as Python or Perl are presented for the control of batch processes, file filtering, and simple data analysis.

ISC 5315. Applied Computational Science I (4). Prerequisites: ISC 5305; MAP 2302; or consent of instructor. This course provides students with high-performance computational tools necessary to investigate problems arising in science and engineering, with an emphasis on combining them to accomplish more complex tasks. A combination of course work and lab work provides the proper blend of theory and practice with problems culled from the applied sciences. Topics include numerical solutions to ODEs and PDEs, data handling, interpolation and approximation, and visualization.

ISC 5316. Applied Computational Science II (4). Prerequisite: ISC 5315 or consent of instructor. This course provides students with high-performance computational tools necessary to investigate problems arising in science and engineering, with an emphasis on combining them to accomplish more complex tasks. A combination of course work and lab work provides the proper blend of theory and practice with problems culled from the applied sciences. Topics include mesh generation, stochastic methods, basic parallel algorithms and programming, numerical optimization, and nonlinear solvers.

ISC 5317. Computational Evolutionary Biology (4). Prerequisites: ISC 5224, 5306, or consent of instructor. This course presents computational methods for evolutionary inferences. Topics include the underlying models, the algorithms that analyze these models, and the creation of software to carry out the analysis.

ISC 5907r. Directed Individual Study in Computational Science (1-3). (S/U grade only.) Study on a selected topic as designated by the student and the directing professor. May be repeated to a maximum of twenty-four (24) semester hours.

ISC 5934. Introductory Seminar on Research in Computational Science (1). (S/U grade only.) A series of lectures given by faculty on research being conducted in the School of Computational Science.

ISC 5935r. Selected Topics in Computational Science (3-12). (S/U grade only.) Selected research topics that are not covered by other courses. May be repeated to a maximum of twelve (12) semester hours.

ISC 5936. Numerical Methods for Stochastic Differential Equations (3). Prerequisites: MAD 3703; MAP 2302; MAS 3105; SAT 4321; or equivalent courses or consent of instructor. This course provides students with basic knowledge of applied and numerical mathematics useful for scientific and engineering modeling, guided by some problems in applications. Focus is on the numerical solution of stochastic differential equations and Monte Carlo methods. A combination of theory and lab work develops the student's intuition and allow for more insight useful for applications.

ISC 5939r. Advanced Graduate Student Seminar in Computational Science (1-3). (S/U grade only.) A series of lectures given by faculty, students or outside scholars on research and research methods related to computational science. May be repeated to a maximum of twelve (12) semester hours.

ISC 5948r. Graduate Internship in Computational Science (3-6). (S/U grade only.) Supervised internship individually arranged to accommodate professional development. May be repeated to a maximum of six (6) semester hours.

ISC 5975r. Thesis (3-12). (S/U grade only.) A minimum of six (6) semester hours is required.

Department of COMPUTER SCIENCE

COLLEGE OF ARTS AND SCIENCES

Chair: David Whalley; **Professors:** Aggarwal, Baker, Burmester, Gallivan, Hawkes, Kohout, Mascagni, Whalley; **Associate Professors:** Banks, Liu, Schwartz, Tyson, Van Engelen, Yasinsac, Yuan; **Assistant Professors:** De Medeiros, Duan, Kumar, Srinivasan, Wang; **Courtesy Professors:** Conrad, Desmedt; **Computing Resources Manager:** Langley; **Associates in Computer Science:** Baldauf, Ford, Langley, Myers; **Assistants in Computer Science:** Chang, Lacher, Stoecklin; **Assistant Scholar/Scientist:** Le Van; **Professors Emeriti:** Lacher, Levitz

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 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 computation and databases; c) computer and network security,

including cryptography; and d) other areas, including neural networks, expert networks and fuzzy sets and systems. These research programs enjoy external support from agencies ranging from the National Science Foundation to the private sector.

Several research institutes and research centers have been established at the University. Some of our faculty members work closely with one of these, the **School of Computational Science (SCS)**. The SCS conducts university-based multidisciplinary research to develop new algorithms and numerical methods to exploit various supercomputer architectural characteristics. Partially funded by the U.S. Department of Energy, SCS 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 high-performance workstations, file servers, and compute servers. Students and faculty whose research requires higher computational power have access to a variety of state-of-the-art machines, including supercomputers and computer clusters, across the University.

Other affiliated research laboratories include the following:

The **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 **Architecture and Compilers for Embedded Systems (ACES) Laboratory** investigates a wide variety of issues related to embedded systems architecture. Tools are constructed to assist compiler writers in optimization and retargeting.

The **Center for Applied Vision and Imaging Sciences (CAVIS)** conducts research motivated by psychophysical data and neurophysiological findings to develop models for real-world problems.

The **Large-Scale Experimental Network and Systems Laboratory** investigates issues related to QoS routing, communication algorithms, and message passing libraries.

The **Florida Cybersecurity Institute** conducts research in the areas of cybersecurity and cybercrime.

Other active research groups subjects include the following: brain imaging, realistic illumination, Web-based 3D simulation, tools for distributed applications, tools for weather forecasting, probabilistic networks, knowledge-based management decision tools, random number generation, Monte Carlo and Quasi-Monte Carlo methods, grid-based computing, POSIX/Ada Real-time systems, application of fuzzy relations and non-classical logics, modeling and simulation environments.

Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Please refer to <http://www.cs.fsu.edu/academics> 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 (excluding Summer) in courses related to their program of studies throughout the entire program of study (except the term of graduation.) The student must receive a grade of "B-" or better on all graduate courses counting toward the graduate degree.

All candidates for doctoral degrees in the department are required to participate in teaching activities at some time during their graduate careers unless waived by the department chair. All students participate in an exit interview with the chair or associate chair during the term of graduation.

Master's Degree

The department offers three majors at the master's level: computer science, information security, and software engineering. Each major offers thesis, project and course-based options.

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. However, all DoD and NSF scholarship for service students are placed in the Information Security track upon 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. Supervised teaching, supervised research, seminars, 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 core 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 5405 Advanced Algorithms (3)
- COT 5507 Analytical Methods (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 5371 Cryptography (3)
- CIS 5930 Applied Security (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 5405 Advanced Algorithms (3)*
- COT 5410 Complexity of Algorithms (3)

Please refer to <http://www.cs.fsu.edu/academics> 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 plan of study will be developed by the student and the major professor. A student in this major must have a minimum of one year of full-time equivalence of documented software engineering experience involving actual work as a salaried member of a software development team. This major is currently offered only at the Panama City campus.

Please refer to <http://www.cs.fsu.edu/current/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 thirty-two (32) semester hours for the Master of Science (MS) degree. The eight (8) courses must include at least one (1) course from each core area as described above. Approved CIS 5930/6930 courses are counted among these, but supervised teaching, supervised research, seminars, directed individual study (DIS), and CIS 5915 may not be included. The thesis is defended by registering for CIS 8976, Master's Thesis Defense (0).

The student in the thesis option is required to propose and create an individual thesis topic of appropriate focus, size and complexity and to write a document discussing it. The thesis is to be written in accordance with the University standards. Upon completion, a thesis must be defended successfully to the department in an open forum and be approved by the major professor and supervisory committee. An electronic version of the thesis must be submitted to the departmental webmaster and the Office of Graduate Studies.

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 core areas described above. Approved CIS 5930/6930 courses are counted among these, but supervised teaching, supervised research, seminars, directed individual study (DIS), and CIS 5970 may not be included. The student also must register for CIS 8974, Master's Project Defense (0), to defend the project. An electronic version of the project must be submitted to the departmental 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 core areas detailed above. A student must have an average of at least "B+" for the three required core area courses in order to graduate under the course-based option. Approved CIS 5930/6930 courses count toward the 10-course requirement, but supervised teaching, seminars, directed individual study (DIS), supervised research, CIS 5915 and CIS 5970 may not be included. A student must also register for CIS 8966, Master's Comprehensive Examination (0).

Supervisory Committee

For the thesis and project options, it is the student's responsibility to form a supervisory committee regardless of his or her selected major. No later than the beginning of work on the thesis or project, the student must secure the consent of an eligible computer science faculty member to serve as the major professor. In consultation with the major professor, the student must secure the consent of at least two additional graduate faculty members to serve as the supervisory committee, chaired by the major professor.

Doctoral Degree

The doctor of philosophy is regarded as a research degree and is awarded on the basis of accomplishment in a recognized specialty in computer science. Such accomplishment should include scholarly mastery of the field, significant contributions to new knowledge in the field, and written and oral communication skills appropriate for the field.

The requirements for the PhD include 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 core areas (software, systems, and theory) from those required for the master's degree. Equivalent courses taken at other institutions must be approved by the Portfolio Review Committee. At least twelve (12) courses beyond those required for a BS degree in computer science must be taken at the 5000- or 6000-level. Details are given at <http://www.cs.fsu.edu/academics>. 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, and are available at <http://www.cs.fsu.edu/academics>.

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.

Student Portfolio Defense

All students admitted to the program but not yet admitted to candidacy, are required to compile and keep current a portfolio containing information relevant to the student's progress in the program. In particular, the results of taking the GRE Computer Science area exam must be included. Other required contents of the portfolio, submission dates, and guidelines for preparing the portfolio are at <http://www.cs.fsu.edu/academics/>.

The portfolio of any student not yet in candidacy is reviewed annually by the departmental Portfolio Review Committee (PRC). This committee consists of a core that is appointed by the Department Chair and normally meets in the spring. Feedback to the student on the contents of the portfolio and on progress toward admission to candidacy is provided after each review.

The final review occurs in conjunction with the defense of the portfolio. Thus, when a student and his or her major professor agree the portfolio is complete, the student should register for the Doctoral Qualifying

Exam, CIS 8962 (0) for the next semester. At most, students can register for the Qualifying Exam twice. A student either passes or fails; there is no conditional pass.

Area Examination

The area examination (CIS 8964) covers the student's intended area of research. It has both written and oral parts. Both parts of the examination are conducted by the student's supervisory committee, which may delegate the responsibility to a larger area committee. It is strongly recommended that the student write an area survey paper as part of this exam. The oral part is open to all department faculty members having doctoral status who elect to participate. The oral part of the examination is held in an open forum that other students are invited to attend and is followed by a closed session if the committee so desires. Students who do not pass the area exam may be advised to retake it at a later time. A student who changes to a new research area after having previously passed this exam will be required to stand for a further exam over the new area. At most, a student can fail the exam once.

Normal expectations are that the portfolio defense occurs prior to taking the area exam or at least in the same semester as the area exam. A doctoral student should have taken the area exam within two semesters (including summer) of passing the QE.

Admission to Candidacy

In order to be advanced to candidacy for the doctoral degree, the student must:

- pass CIS 8962, the qualifying examination, which consists of passing the defense of the portfolio
- pass CIS 8964, the preliminary exam, which consists of passing the area examination

Prospectus

The student must formally propose the research to comprise the dissertation to his or her supervisory committee in the form of a prospectus. The prospectus should consist of much of the background work for the dissertation, including:

1. A thorough literature review
2. Theory, preliminary computational results, and/or bases for the feasibility of the research
3. A proposal for research to be completed for the dissertation

In addition, as an appendix to the prospectus, publication plans should be presented. The research proposed should make clear and substantial advances in the state of knowledge in computer science, and the publication plans should be designed to affirm the quality and nature of the research. Publication should be in nationally recognized conferences and journals in the field. The prospectus must be successfully defended before the student's supervisory committee in an open meeting.

Dissertation

After completing the research proposed in the prospectus, the student must write a dissertation. The dissertation represents the fulfillment of the proposals made in the prospectus. The dissertation document must comply with all current University standards for style. The dissertation must be successfully defended before the student's committee in an open meeting. The dissertation must be successfully defended within five (5) years of passing the preliminary exam.

Definition of Prefixes

- CAP**—Computer Application Development
- CDA**—Computer Design/Architecture
- CEN**—Computer Software Engineering
- CGS**—Computer General Studies
- CIS**—Computer Science and Information Systems
- CNT**—Computer Networks
- COP**—Computer Programming
- COT**—Computing Theory

Graduate Courses

CAP 5415. Principles and Algorithms of Computer Vision (3). Prerequisite: COP 4530. This course examines the basic computational principles and algorithms to extract information from images and image sequences. Topics include imaging models, linear and nonlinear filtering, edge detection, stereopsis and motion estimation, texture modeling, segmentation and grouping, and deformable template matching for recognition.

CAP 5605. Artificial Intelligence (3). Prerequisite: COP 4530. Introduction, representing knowledge, controlling attention, exploiting constraints, basic LISP programming, basic graph searching methods, game-playing and dealing with adversaries, understanding vision, theorem proving by computer, computer programs utilizing artificial intelligence techniques.

CAP 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 5632. Automated Reasoning (3). This course covers the principles of automated reasoning and mechanical theorem proving. Topics include propositional logic, predicate logic, Skolem standard forms, Herbrand's Theorem, various resolution principles and methods, the logical basis of Prolog, and the interactive theorem prover Otter.

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 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 5055. Project Development (3). Prerequisite: CEN 5035. This course deals with the planning, design, validation and implementation of a large scale project using IEEE deliverables, state-of-the-art software engineering techniques, and analysis and design project reviews and evaluations prior to implementation in the Graduate Software Project.

CEN 5064. Advanced Software Design (3). Prerequisites: CEN 5035. This course concentrates on the design of software systems after requirements engineering has been completed. The course offers education in techniques such as architectural design, pattern integration, and refactorings.

CEN 5066. Software Engineering in Graphics (3). Prerequisite: CAP 4730. Software engineering techniques as applied to graphical concepts based on ISO 7942, the Graphical Kernel 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 area network protocols and standards; network interconnection; transport protocols; integrated services digital networks (narrowband and broadband); switching techniques and fast packet switching.

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). (S/U grade only.) 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 Florida State University's campus network and the Tallahassee Metropolitan Network.

CGS 5266. Digital Design (3). (S/U grade only.) Prerequisite: MAD 2104 or 3107. For graduate non-majors and graduate majors needing foundational work in computer sciences; credit may not be applied toward 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). (S/U grade only.) 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 toward a graduate degree in computer science. Basic computer structure and design, register transfer and micro operations, central processor organization, microprogramming, arithmetic processor design, input-output, memory organization, virtual memory, microprocessors and microcomputer architecture.

CGS 5275. Assembly and Machine Language (2). (S/U grade only.) Prerequisite: COP 4530. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. 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 5409. Object-Oriented Programming in C++ for Non-majors (2). Topics include basics of C++ language, objects and classes, programming with classes, constructors and destructors, dynamic memory allocation, function and operator overloading, master classes, the class iostream, base and derived classes, and templates. May not be applied toward a degree in computer science.

CGS 5425. Object-Oriented Programming with Data Structures (3). (S/U grade only.) Prerequisites: COP 3330; MAD 2104 or 3107. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Structured and object-oriented programming; invariant relations, stepwise refinement; text processing, internal sorting methods, linear tables, pointers and linked data structures, recursive programming and recursion elimination, sequential file processing; trees and graphs; program verification and running time analysis; application of concepts through programming projects.

CGS 5426. Programming Language Concepts (3). (S/U grade only.) Prerequisites: COP 3331, 4530. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. A survey of programming languages and language features and an introduction to compilers. Languages to be discussed include FORTRAN, Pascal, Ada, PL/1, APL, and LISP. An oral presentation is required.

CGS 5427. Algorithm Design and Analysis (3). (S/U grade only.) Prerequisites: COP 4530; MAD 2104, or 3107. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Techniques for the analysis of computer algorithms; examples of well-designed algorithms and associated data structures; principles of algorithm design and application of programming projects.

CGS 5428. Relational Database Theory (3). (S/U grade only.) Prerequisite: COP 3330; MAD 3104 or 3107. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Basic file organization methods, indexed files, multi-key processing; architecture of database management systems; relational, hierarchical network, and semantic database models; normalization, distributed databases and file systems; practical use of a DBMS and the building of a database application.

CGS 5429. Introduction to Computer Theory (3). (S/U grade only.) Prerequisites: COP 3331; MAD 3105 or 3107. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Regular expressions; regular, context-free, context-sensitive, and unrestricted grammars; foundations of language theory; finite automata and linear grammars; pushdown automata; Turing machines and non-solvability.

CGS 5469. FORTRAN for Graduate Non-specialists (3). (S/U grade only.) 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). (S/U grade only.) Prerequisites: CDA 3101; COP 4530. For graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Design principles of batch multi-programming and time-sharing operating systems. Linking, loading, input-output systems, interacting processes, storage management, process and resource control, file systems.

CIS 5357. 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 5370. Computer Security (3). Prerequisites: CGS 3408; COP 3502, 4610, or permission of instructor. Topics in this course include computer security threats and attacks, covert channels, trusted operating systems, access control, entity authentication, security policies, models of security, database security, administering security, physical security and TEMPEST, and brief introductions to network security and legal and ethical aspects of security. A research paper or project is required.

CIS 5371. Cryptography (3). Prerequisite: MAD 3105. This course addresses issues of modern cryptography covering theory and practice. Algorithms such as the RSA, ElGamal, and the Digital Signature Standard are covered in depth.

CIS 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 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 (1-9). (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.

CNT 5415. Applied Computer and Network Security (3). In this course, students familiarize themselves with current and emerging threats to the security of computer systems and networks, including viruses, worms, and network intrusion; and with techniques for the prevention, detection, and recovery from such attacks, such as firewalls, intrusion detection systems, secure coding practices, and others. Attack and defense mechanisms are studied in a systematic way to develop students' practical and analytical skills to identify and correct or mitigate threats to computer systems and networks.

COP 5385. Reactive Systems and Hierarchical State Machines (3). Prerequisites: COP 4530, 4610. This course covers the theory of hierarchical state machines (HSM) and the use of HSM to model and implement reactive systems (RS). Implementations of HSM in C, C++, and Java are explored. HSM are applied for modeling and implementing RS, including real-time, multi-threaded, and embedded systems. Selected articles from the rapidly expanding literature and an advanced project are included. Permission of instructor required for students with credit for CEN 4xxx.

COP 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 5641. Kernel and Device Driver Programming (3). Prerequisites: COP 4610, 5570, or permission of instructor. This course covers internals of the Linux operating system kernel, including virtual and physical memory management, scheduling, and device drivers. Focus is also placed on kernel modules, hardware interfaces, char and block devices, kernel debugging, interrupt handling, and memory mapping. Laboratory exercises include modifying example modules and project developing a new device driver.

COP 5642. RealTime Systems Theory and Practice (3). Prerequisites: COP 4610 or 5570. This course addresses the theoretical foundations and practical techniques for the design and implementation of real-time computer systems. Topics include applicable scheduling theory, the use of computers for controlling real-time processes and the use of real-time operating system. Laboratory work includes writing software to control a physical device with hard-timing constraints and analysis of scheduling performance by simulation. A term project and report are required.

COP 5725. Database Systems (3). Prerequisites: COP 4020, 4531, 4610, 4710. Use of a generalized database management system; characteristics of database systems; hierarchical, network, and relational models; file organizations.

COP 5818. Distributed Applications Development (3). Prerequisite: COP 3252. Programming of distributed Web applications using Java database connectivity, servlets, Java server pages, remote method invocation, and enterprise Java beans (both session and entity beans); use of the Sun Microsystems Java 2 Enterprise Edition development platform either directly or through an integrated development environment such as IBM's Websphere.

COT 5310. Theory of Automata and Formal Languages (3). Prerequisites: COP 4020; COT 4420. Formal models of computation; automata; formal languages, their relationships, decidable and undecidable problems.

COT 5315. Programming Language Foundations (3). Prerequisites: COP 4020; MAD 3105. Topics in this course include conceptual subtleties in programming languages; formal specification of syntax and semantics; and issues in the design and implementation of programming languages.

COT 5405. Advanced Algorithms (3). Prerequisite: COP 4531. This course covers algorithms, formal proofs of correctness, and time complexity analysis for network flow problems, approximation of NP hard combinatorial optimization problems, parallel algorithms, cache-aware algorithms, randomized algorithms, computational geometry, string algorithms, and other topics requiring advanced techniques for proof of correctness or time/space complexity analysis.

COT 5410. Complexity of Algorithms (3). Prerequisites: COP 4531, MAD 3105 or 3107. Formal methods for the analysis of algorithm complexity, application to specific algorithms, lower bounds, asymptotically optimal algorithms, Reducibilities, NP completeness, and other classifications of hard problems.

COT 5507. Analytic Method in Computer Science (3). Prerequisite: COP 4531. This course teaches computer science students the fundamental discrete mathematics required for serious graduate work in Algorithms and Theoretical Computer Science. It specifically covers topics in recurrent problems, sums, integer functions, elementary number theory, binomial coefficients, special numbers, and generating functions.

COT 5540. Logic for Computer Science (3). Prerequisite: COT 4420. Syntax, semantics, and proof theory of propositional logic and first order languages; prenex normal form; Gentzen systems; resolution for propositional logic; elements of PROLOG and program verification.

CAP 6417. Theoretical Foundations of Computer Vision (3). Prerequisite: CAP 5415. This course covers theoretical foundations of computer vision. By formulating vision as an inference process, approaches to vision are presented and analyzed systematically. Topics include Marr's computational vision paradigm, regularization theory, Bayesian inference framework, pattern theory, and visual learning theories.

CIS 6900r. Directed Individual Study (1-12). (S/U grade only.) May be repeated to a maximum of twenty-four (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). This is an advanced seminar in computer science. May be repeated, and duplicate registration allowed during the same term, for a total of 12 semester hours.

CIS 6980r. Dissertation (1-12). (S/U grade only.)

CIS 8962. Doctoral Qualifying Examination (0). (P/F grade only.) May be repeated twice at most.

CIS 8964. Doctoral Preliminary Examination (0). (P/F grade only.)

CIS 8966. Master's Comprehensive Examination (0). (P/F grade only.)

CIS 8974. Master's Project Defense (0). (P/F grade only.)

CIS 8976. Master's Thesis Defense (0). (P/F grade only.)

CIS 8985. Defense of Dissertation (0). (P/F grade only.)

COMPUTER THEORY:
see Computer Science

CONSUMER AFFAIRS:
see Family and Child Sciences

COUNSELING PSYCHOLOGY AND HUMAN SYSTEMS:
see Educational Psychology and Learning Systems

CREATIVE WRITING:
see English

CRIMINOLOGY AND CRIMINAL JUSTICE

COLLEGE OF CRIMINOLOGY AND CRIMINAL JUSTICE

Professors: Blomberg, Chiricos, Doerner, Gertz, Kleck, Maier-Katkin, Waldo; **Associate Professors:** Bales, Bullington, Coonan, Greek, Kutnjak-Ivkovich, Mears, Reisig; **Assistant Professors:** Barker, Beaver, Close, Hay, Holtfreter, Stults, Warren; **Visiting Assistant Professor:** Bacon; **Professors Emeriti:** Czajkoski, Jeffery, Kirkham

The College 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 joint master's degree program is offered with the School of Public Administration and Policy, and with the College of Social Work.

For complete details of degree requirements, plus a description of the College of Criminology and Criminal Justice, its facilities, opportunities, and available financial assistance, refer to the "College of Criminology and Criminal Justice" chapter of this *Graduate Bulletin*.

Note: CJE 5766, 5766L, 5767, 5767L, 5768, 5768L, 5769 and 5769L are offered only at our Panama City Campus. For further details about these courses and related degree programs, consult the Panama City campus Web site at <http://www.pc.fsu.edu>.

Definition of Prefixes

CCJ—Criminology and Criminal Justice

CJE—Law Enforcement

CJJ—Juvenile Justice

CJL—Law and Process

Graduate Courses

CCJ 5016. Crimes of the Powerful (3). This course provides an in-depth examination of the many types of crimes committed by the powerful. Powerful people, corporations, and governments commit a variety of serious, deadly acts that if committed by "ordinary" or powerless people would be labeled and treated as criminal behavior.

CJJ 5020. Juvenile Justice (3). This course considers the processing of offenders through the juvenile justice system. It investigates the special forms of justice applied to non-adults by arrest, detention, adjudication and juvenile corrections.

CJE 5024. Police and Society (3). A social psychological examination of current issues and problems in municipal law enforcement, including such topics as the informal exercise of police authority, police role conflict, the relative significance of law enforcement and social service, and interactional dynamics of police subculture.

CCJ 5028r. Seminar in Criminal Justice (3). This course investigates in detail some special problems of criminal justice policy and practice. May be repeated to a maximum of nine (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 5050. Proseminar in Criminology (3). This course provides an overview of various important issues in criminological theory and research and the administration of criminal justice.

CCJ 5078. Computer Applications in Criminal Justice (3). This course introduces the computer and the Internet. Will include a discussion of the use of these technologies within the criminal justice system. Class will cover word processing, spreadsheets, databases, graphics, and Internet applications such as email, chat, forum discussions, search engines, Web page browsers, etc.

CCJ 5082. Science, Evidence and the Law (3). This course examines the philosophy of science, the procedures of the law and the criteria required for results of scientific examinations to be admitted into a trial as evidence.

- CCJ 5285. Survey of Criminal Justice Theory and Research (3).** An overview of the theoretical issues and research on the law and legal control of deviance in society.
- CCJ 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.
- 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).** This course is an introduction to theory in Criminology. It examines the principal functions of criminological theories and how they are rooted in the historical and social contexts in which they originate.
- CCJ 5606. Survey of Criminological Theories (3).** Covers the major theories of criminal Involvement, with attention to each theory's history, hypothesis, and empirical adequacy.
- CCJ 5607. History of Criminological Thought (3).** An historical review of thought about crime and punishment with emphasis on the origin and evaluation of basic theories of crime-causation and community response as they arose in the nineteenth and early twentieth centuries.
- CCJ 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 5625. Ecology of Crime (3).** An analysis of crime, delinquency, and victimization within various demographic and ecological systems of society. The course will focus on characteristics of offenders and offenses.
- CCJ 5636. Comparative Criminology and Criminal Justice (3).** This course offers a comparative analysis of crime issues worldwide and reviews criminal justice system responses to both localized and transnational crime.
- CCJ 5669. Race, Ethnicity, Crime and Social Justice (3).** This course considers the relationships among race, ethnicity, and crime in the justice system. The effect of social policy on racial and ethnic inequality is studied, and theories of ethnic and racial justice are presented in terms of their effect on crime and criminal justice.
- CCJ 5672. Gender, Crime and Justice (3).** This course considers the impact of gendered relations on crime and justice. Theories of gender and society are presented and the special relationship between gender and crime is studied.
- CCJ 5704r. Introduction to Research Methods and Statistics (3).** A basic introduction for graduate students to statistics and research methods as they are used in criminology. It is intended for students who have not had undergraduate courses in methods or statistics. May be repeated to a maximum of six (6) semester hours.
- CCJ 5705. Research Methods in Criminology I (3).** Research design for criminological studies with an emphasis on data collection methods, measurement of validity and reliability, and causal analysis.
- CCJ 5706. Applied Statistics in Criminology I (3).** This course focuses on the use of statistical techniques in criminology.
- CCJ 5707. Qualitative Methods in Criminology (3).** Aimed at familiarizing students with the nature and utility of qualitative field work in various areas of criminological research.
- CCJ 5709. Survey Research Methods in Criminology and Criminal Justice (3).** Prerequisites: CCJ 5705, CCJ 5706. This course is an introduction to the use of survey research in criminology and criminal justice.
- CCJ 5740. Data Analysis in Criminology and Criminal Justice (3).** This course covers at an intermediate level, data analysis problems in quasi-experimental designs and theory testing in criminology.
- CJE 5766. Forensic Science in Investigation (3).** This course combines theories of the conduct of crime with knowledge of how physical evidence is produced during the commission of a crime to produce information that enables the investigation and prosecution of criminal activity. The course emphasizes decision-making in forensic science examinations and evaluation of the reliability of these examinations.
- CJE 5766L. Forensic Science in Investigation Laboratory (2).** Corequisite: CJE 5766. This laboratory applies various techniques for the examination of physical materials generated during the commission of a crime in order to produce information required to detect and investigate criminal activity. This laboratory emphasizes the implementation and development of protocols and the calculation of error rates.
- CJE 5767. Scientific Underwater Investigation (3).** Prerequisite: CJE 3761. This course builds upon the Introduction to Underwater Investigation Laboratory by providing the technology to collect data in an underwater environment according to the scientific method. The course delineates the similarities and differences of investigative techniques used in forensic science and other science disciplines that function underwater. Emphasis is placed on the validation of measurement protocols.
- CJE 5767L. Scientific Underwater Investigation Laboratory (1).** Prerequisite: CJE 3761L. Corequisite: CJE 5767. Building upon previous laboratory work, this course provides the tools and techniques to collect data in an underwater environment for prolonged periods of time. The underwater data collection techniques use traditional underwater technology adapted from forensic science and other scientific fields. Emphasis is placed on the verification of measurement protocols.
- CJE5768. Underwater Crime Scene Methodology (3).** Prerequisites: CJE 5767, CJE 5766. This course synthesizes various theories for the conduct of crime with the knowledge of how physical evidence is produced during the commission of a crime on or under the water. Through this synthesis, students will learn to produce information using traditional underwater methodology that enables the investigation and prosecution of criminal activity. Special emphasis is placed on the validation and verification of underwater examination protocols.
- CJE 5768L. Underwater Crime Scene Methodology Laboratory (1).** Prerequisites: CJE 5767, CJE 5766. Corequisite: CJE 5768. This laboratory applies traditional underwater measurement methodology used for the examination of physical materials generated during the commission of a crime on or under the water, in order to produce information that enables the investigation and prosecution of criminal activity. Special emphasis is placed on evaluating the reliability of the underwater examination protocols.
- CJE5769. Underwater Crime Scene Investigation (3).** Prerequisite: CJE 5768. This course combines the various analytical underwater examinations into a holistic investigation process designed to locate and detect persons and physical evidence involved in, or victims of, crimes committed in, or on, the water. Emphasis is placed on the theory of the technology and the scientific decision-making required for its optimum application and on conducting and evaluating and underwater investigative program.
- CJE 5769L. Underwater Crime Scene Investigation Laboratory (1).** Prerequisite: CJE 5768L. Corequisite: CJE 5769. This laboratory course empirically applies methodology based on advanced technology to enhance the location and detection of physical evidence used, or intended for use, in the commission of underwater crimes. Emphasis is placed on the use of the Incident Command System and the UCSI Process for management of an underwater crime scene investigation and on the verification of investigative protocols.
- 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 6065. Professional Development in Criminology (3).** This course provides students with the key training needed to engage in the professional activities central to a successful scholarly career in criminology.
- CCJ 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 6665. Victimology (3).** Prerequisites: CCJ 5705, CCJ 5706. This course introduces students to the field of victimology and explores its conceptual boundaries, basic concepts and literature within various subareas.
- CCJ 6708. Seminar in Crime Research (3).** Encourages advanced students to approach the multifaceted problem of research as a set of interrelated issues ranging from tasks of concept formation and theory construction through research design and data collection to the assessment and analysis of the generated data.
- CCJ 6741. Advanced Data Analysis in Criminology and Criminal Justice (3).** A survey of advanced data analysis approaches used in criminological research. The course will generally cover problems of constructing indices and scales, procedures for analyzing limited dependent variable, structural equation models, models with latent variable and time series analysis.
- CCJ 6920r. Seminar in Theoretical Criminology (3).** Contents will vary as instructors present different developments, problems, and controversies. May be repeated to a maximum of nine (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).** (P/F grade only.)
- CCJ 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- CCJ 8985r. Dissertation Defense (0).** (P/F grade only.)

Interdepartmental Certificate Program in CRITICAL THEORY

COLLEGE OF ARTS AND SCIENCES

Director: Barry J. Faulk, Department of English

Critical theory is an interdisciplinary pursuit actively sought by scholars, both nationally and internationally. This endeavor touches all disciplines to some extent; the areas most involved to date include the national literatures, humanities, classics, philosophy, religion, history, the social sciences, the visual arts, and the performing arts. A positive result of contemporary critical theory has been to challenge the fundamental boundaries separating the academic disciplines. Theoretical speculations necessarily cross disciplines because investigative methods utilize a variety of disciplines. The Interdepartmental Certificate

Program in Critical Theory provides an opportunity for students to work within a multidisciplinary structure and explore elements of theory that will enhance their major areas of study.

Admission Requirements

Any student who has been admitted to graduate study at Florida State University as a regular or 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 adviser. This is not a degree program and does not satisfy the requirements of a graduate degree program. The certificate will only be awarded at the completion of a graduate degree.

Requirements

The student must complete eighteen (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 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

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Interim Co-Chairs: Patricia Phillips, Russell Sandifer; **Professors:** Davis, Farrell, Fichter, Morgan, Phillips, Sommer, Wagner, Young, Zollar; **Associate Professors:** Austin, Corbin, Humphreys, Perpener, Sandifer, Welsh; **Assistant Professor:** Glenn; **Assistant in Dance:** Houlihan

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 studio and related studies and the master of arts (MA) degree in American dance studies. Currently these are the only graduate dance programs in Florida. Graduate study in dance began at Florida State University in the mid-1960s, and over the decades has continued to develop its mission: to provide work leading to the Bachelor of Fine Arts, 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 in dance with a major in studio and related studies is choreography and performance with the opportunity for significant investigation into one or more areas of study beyond but related to traditional studio studies. The program should prepare the student to move fluidly through at least one area of specialty into application to the traditional studio life of a dancer.

The emphasis of the MA degree in American dance studies is on the preparation of the scholar. This is a unique program based in research that investigates a wide range of dance practices, from the vernacular and religious to stage forms. The major focus is on American dance forms that are used as a lens to illuminate the deeper background of the inter-textual culture that shapes American art. As the integration of theory and practice enhances both art-making and academic inquiry, the student is encouraged to take advantage of the rich array of courses offered across the curriculum.

Visiting artists, guest choreographers, an outstanding dance lecture series and film series are regular enhancements of the curriculum. An ongoing performance and repertory project brings outstanding dance masterworks to campus for performance by the Florida State University dancers, linking the artistic and technical development of dancers to their understanding of the cultural and historical context of the art. The recently established Maggie Allisee National Center for Choreography, a creative research center on the university campus, also hosts numerous internationally recognized dance artists.

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, writing samples, and credentials. Careful scrutiny will be given to any candidate who does not meet either of the following two University admission requirements:

1) a minimum of 3.0 grade point average on a 4.0 scale on all work attempted while registered as an upper-division student working toward a baccalaureate degree; or 2) a 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 adviser, six (6) semester hours.
 4. **Final Project in Choreography and/or Performance:** Six (6) semester hours: DAN 5972 (creative thesis: graduate concert). All MFA candidates must fulfill a prerequisite by performing or understudying in at least one choreography or restaging produced by graduate faculty or commissioned guest artist before producing his/her own creative thesis. Any exceptions to this prerequisite will be determined by the graduate adviser in consultation with the graduate faculty.
 5. **Electives:** 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 Studio and Related Studies

The master of arts degree candidate with a major in studio and related studies must have completed an undergraduate major in dance or must demonstrate an equivalent level of achievement. Admission into the graduate dance program is determined on the basis of the candidate's

audition, interview, writing samples, and credentials. Careful scrutiny will be given to any candidate who does not meet either of the following two University admission requirements: 1) a minimum of 3.0 grade point average on a 4.0 scale on all work attempted while registered as an upper-division student working toward a baccalaureate degree; or 2) a 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 as the audition, interview, and writing samples provide alternate methods of assessing qualifications for admission. The student's progress is assessed continuously throughout the graduate program. Specific assessment occurs at the end of the first year of graduate study. A probationary period may be established if a student is having difficulty and needs special attention. A student who cannot meet the 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.

Summary of Minimum Requirements

The master of arts in dance with a major in studio and related 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 eleven (11) semester hours of technique, three (3) semester hours of seminar in dance history and research, five (5) semester hours of choreography and choreographic project, and two to three (2–3) credit hours of directed individual study (capstone experience). Additionally, the student must earn fifteen (15) semester hours of elective courses in one or more studio related courses. Elective courses must be approved by the student's adviser. Students are required to investigate possibilities for elective courses that relate to their areas of interest, deepen their understanding of dance studio studies, and provide a significant investigation into one or more related areas of study that will impact their particular contribution to the field of dance upon graduation. Individual programs are planned by the student with approval of the student's faculty adviser. Students must achieve at least an intermediate proficiency level in either ballet or contemporary dance technique. Students must develop an appropriate capstone experience that substantively synthesizes their unique curricular experience. The capstone project must meet the approval of the graduate adviser and the graduate faculty mentoring the candidate's individual program.

Requirements for a MA in American Dance Studies

The master of arts 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 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 adviser. The student must also complete the University-wide requirement regarding foreign language proficiency. This requirement may be met by one of the following: (1) Achieving a satisfactory performance on the Graduate School Foreign Language Test; (2) Completing twelve (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, Emphasis on Activity

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 5950r. 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. May be repeated within the same semester.

DAE 5387. Dance History Pedagogy (3). This course introduces students to basic skills necessary to teach dance history and dance appreciation at the undergraduate level.

DAE 5940. Supervised Teaching (2). (S/U grade only.) A maximum of two (2) hours may apply to a master's degree.

DAN 5126. Current Issues in Dance History, Theory, and Research (1-3). This course introduces students to current state-of-the-art trends in dance history, theory and research methodology. As the field of dance scholarship is currently undergoing dramatic, paradigm-shifting changes, the content of the course changes each semester to include the most current information. May be repeated to a maximum of nine (9) semester hours.

DAN 5128. Theory of Dance (3). Course focuses on the study of theoretical approaches to dance as evidenced by the work of influential scholars in the field of dance theory.

DAN 5147. History of American Dance 1492–1892 (3). A course of study covering the evolution of American dance history from 1492–1892. A maximum of three (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 5193. History of African American Social Dance of the Twentieth Century (3). Traces the major African-American social dance styles of the twentieth century. These dance styles are examined in a context that facilitates understanding their relationship to the culture(s) and events that produced and influenced them.

DAN 5194. Dancing in the Movies (3). Traces the evolution of dance in the American popular film industry. Emphasis is placed on how movies encapsulate popular stereotypes and icons, revealing the roles of gender, race, fashion, economic and political forces.

DAN 5486. Documentation Techniques (3). Prerequisite: DAN 4418. This course combines hands-on experience with reading, discussion, and critique to develop technical skills and aesthetic awareness related to the documentation of concert dance. The course requires a significant research paper on current practices in dance documentation and a directing project for a dance concert documentation.

DAN 5508. Visual Design for Choreography (3). Critical analysis of the relationship between visual design and dance choreography. Study of current status of theatre design and technology.

DAN 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 5940r. Dance Internship (1–12). This course consists of a supervised internship to provide students with professional experience in their field. Design of the internship will be developed by the student and intern host in consultation with the academic adviser. May be repeated to a maximum of twelve (12) semester hours.

DAN 5960r. Master's Comprehensive Examination (0). (P/F grade only.)

DAN 5972r. Creative Thesis: Graduate Concert (2–6). (S/U grade only.) 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). (P/F grade only.) Prerequisite: DAN 5973. Thesis topic to be arranged with adviser.

Center for DEMOGRAPHY AND POPULATION HEALTH

COLLEGE OF SOCIAL SCIENCES

Director: Elwood D. Carlson (Sociology); **Professors:** Eberstein (Sociology), Keith (Sociology), Schmettmann (Economics), Turner (Sociology); **Associate Professors:** Brewster (Sociology), Miles (Urban and Regional Planning), Simon (Sociology); **Assistant Professors:** Coutts (Urban and Regional Planning), Hock (Economics), Jordan (Geography), Lloyd (Sociology), Taylor (Sociology), Tillman (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 center's research and training programs are supported by grants and contracts from private and public entities concerned with the health and well-being of human populations. The center offers a master's degree in demography and also cooperates in the graduate programs of departments in the College of Social Sciences, wherein candidates for degrees may elect demography as an area of concentration. Graduate students and faculty in other colleges and schools within the University are also welcome to participate in the center's research and training activities.

The center also awards the **William Serow Prize**, a scholarship providing supplemental financial support, to outstanding students in the master's degree in demography program. The center maintains its own computer laboratory and library facilities, which are available to students in the master's program and which support the center's research and training activities. Faculty members are very active in research activities and frequently invite students to participate in all phases of research projects. 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 fifteen (15) semester hour demographic core, while substantive specialization is obtained by completing an additional twelve (12) 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 option 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 and at <http://www.popcenter.fsu.edu>.

Required Demographic Core

Fifteen (15) semester hours, chosen from the following:

- Three (3) semester hours of either ECP 5115 (Economics of Population) or SYD 5045 (Introduction to Demography)
- Three (3) semester hours of SYD 5135 (Techniques of Population Analysis); ECP 5117 (Mathematical Demography)
- Three (3) semester hours of either GEO 5159 (Geographic Information Systems) or URP 5272 (Urban and Regional Information Systems)

Note: The above courses are normally offered in the Fall semester; the courses listed below are generally offered during the Spring semester.

- Three (3) semester hours of either SYD 5215 (Mortality), SYD 5225 (Fertility), or SYD 5235 (Mobility)
- Three (3) semester hours of either ECP 5205 (Labor Markets), ECP 5536 (Seminar in Health Economics) or URP 5261 (Methods of Planning Analysis III: Plan Development)

List of Graduate-Level Courses for Demographers

DEM 5930	Special Topics in Demography
DEM 5972	Masters Research Paper in Demography
ECO 5425	Advanced Quantitative Methods II
ECP 5115	Economics of Population
ECP 5117	Mathematical Demography
ECP 5205	Labor Markets
ECP 5536	Health Economics
ECS 5015	Economic Development: Theory and Problems
ECS 5028	Economies in Transition
GEO 5157	Advanced Geographic Information Systems
GEO 5159	Geographic Information Systems

GEO 5472	Political Geography
GEO 5545	Advanced Economic Geography
GEO 5605	Urban Geography
SYA 5345	Introduction to Research Methods
SYA 5406	Multivariate Analysis
SYA 5407	Advanced Quantitative Methods
SYA 5455	Social Statistics and Data Analysis
SYD 5045	Introduction to Demography
SYD 5105	Population Theory
SYD 5135	Techniques of Population Analysis
SYD 5137	Fundamentals of Epidemiology
SYD 5145	Population Policy
SYD 5215	Mortality
SYD 5225	Fertility
SYD 5235	Mobility
SYD 5425	Urbanization and Population Distribution
URP 5261	Methods of Planning Analysis III: Plan Development
URP 5272	Urban and Regional Information Systems
URP 5530	Policy and Planning for the Aging
URP 5614	Population and Development Planning

DEMOGRAPHY AND AREA STUDIES:
see also Middle and Secondary Education; Economics;
Sociology

**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 the Study of Critical Issues In ECONOMIC POLICY AND GOVERNMENT

COLLEGE OF SOCIAL SCIENCES

Director: Keith R. Ihlanfeldt; **Professors:** Barrilleaux, Benson, Cheung, Feiock, Gwartney, Holcombe, Rasmussen

The DeVoe L. Moore and Family Center for the Study of Critical Issues in Economic Policy and Government is an interdisciplinary unit in the College of Social Sciences dedicated to increasing knowledge and public understanding about the role of government in a market economy. The center emphasizes the study of how government rules, regulations, and programs affect the economy and individuals. Bringing the insights of economics, political science, and public administration to the study of state and local regulations is a major focus of the center's efforts.

The center's faculty engages in research designed to increase understanding about the effects of local and state rules and regulations. The center also sponsors annual conferences that bring national leaders and scholars to The University to discuss policy questions. Graduate students in the College of Social Sciences are encouraged to participate in the program's annual conferences, symposia, and research projects. Graduate students are employed on research contracts and grant projects on the basis of their contributions in time and skill. The center offers fellowships for students writing dissertations on subjects related to the center's mission.

ECOLOGY:
See Biological Science

Department of ECONOMICS

COLLEGE OF SOCIAL SCIENCES

Chair: Bruce L. Benson; **Professors:** Benson, Cobbe, Fournier, Gwartney, R. Holcombe, Ihlanfeldt, Isaac, Macesich, Macpherson, Marquis, Mason, Norrbin, Rasmussen, Sass, Schlagenhauf, Schmettmann; **Associate Professors:** Beaumont, McCaleb, Salmon, Zuehlke; **Assistant Professors:** Atolia, Bokhari, Cheung, Heiland, Hock, Pevnitskaya, Ryvkin, Semykina; **Courtesy Professors:** Du Mond, Elzie, Fabricant, Harris, Klick, Stratis; **Professors Emeriti:** Canterbury, Downing, Laird, Rockwood, Sliger, Sorensen; **Lecturers:** Calhoun, Carter, L. Holcombe

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, law and economics, urban economics, and economic policy and government. Specialties in other fields outside the department, particularly statistics, finance, supercomputing, and other areas in the social sciences, are also available.

A detailed description of graduate work in economics appears in the *Guide for Graduate Students in Economics*. The *Guide* may be obtained by writing to: *Director of Graduate Studies, Department of Economics, Tallahassee, FL 32306-2180, or by visiting the department Web page at <http://www.coss.fsu.edu/economics/>.*

Admission Requirements

A combined score of at least 1000 on the verbal and quantitative aptitudes portions of the Graduate Record Examinations (GRE) and an upper division grade point average of at least 3.0 are required for admission. Prior graduate training must show a minimum grade point average of 3.4.

Applicants should provide the department with 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 213 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 \$13,000 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 non-waivable mandatory fees. For the 2006-07 academic year, the value of these waivers was \$199.78 per credit hour for in-state students or \$801.12 per credit hour for out-of-state students. It is not usually possible for the department to waive out-of-state tuition for non-residents of the United States, even if they are offered an assistantship.

Students entering the PhD program with a bachelor of science degree may apply for a department assistantship for a maximum of four years. Students entering 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-two (32) 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-six (26) 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. In some cases, students may also be asked to pass examinations in two fields of specialization. Generally, three 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
- Health economics
- Industrial organization and regulation
- International economics and development
- Labor economics
- Law and economics
- Population economics
- Public economics
- Urban 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 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 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 of each graduate student.

ECO 5206. Macroeconomic Theory, Practice, and Policy (3). This course investigates the classical and Keynesian models of income determination, post-Keynesian macro theories, stagflation, aggregate production functions and productivity, and introduction to dynamic macro systems.

ECO 5207. Macroeconomic Theory II (3). Prerequisite: ECO 5204 or 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. Econometrics I (3). This course is an introduction to econometric methods focusing on the statistical foundation for estimation and inference in the classical regression model.

ECO 5417. SAS Programming (3). Prerequisite: Graduate standing or Instructor permission. This course is an introduction to computer programming using the SAS language, covering how to write SA programs to accomplish the types of statistical tasks, frequently encountered in economic and other social research.

ECO 5420. Basic Applied Econometrics (3).

ECO 5423. Econometrics II (3). Prerequisite: ECO 5416 or permission of instructor. This course considers extensions of the classical regression model. Topics include nonlinear least squares, instrumental variables estimation, and generalized least squares.

ECO 5427. Limited Dependent Variable Models (3). Prerequisite: ECO 5423. This course introduces graduate students to logit, probit, tobit, multinomial logit, selection, and hazard models.

ECO 5428. Time Series Analysis (3). Prerequisite: ECO 5423. Univariate and multivariate time series methods including: univariate ARIMA, transfer function models, state space models, vector auto-regression models, vector error correction models, spectral analysis, causality tests, and unit root tests. Data analysis and model building are emphasized.

ECO 5434. 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 5706. Seminar in International Trade Theory and Policy (3). Theories of the cause, magnitude, and patterns of real trade among nations, ranging from comparative cost explanations to Heckscher-Ohlin theories and recent approaches. Policy issues regarding contemporary international trade problems, the role of tariffs, and quotas also are covered.

ECO 5707. International Trade (3). Prerequisites: ECO 2013, 2023. Theory of international trade, the gains from trade, tariffs and other trade restrictions, cartels.

ECO 5715. International Finance (3). Prerequisites: ECO 2013, 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 5922r. Professional Development for Economists (0-2). Prerequisite: Admission to MS program in Economics. This course covers issues of ethics and responsibilities for professional economists, and presentations and discussions of the work of professional economists in the public and private sectors by faculty and visiting economists.

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.)

Department of EDUCATIONAL LEADERSHIP AND POLICY STUDIES

COLLEGE OF EDUCATION

Chair: Gary M. Crow; **Professors:** Beckham, Crow, Irvin, Kunkel, Lick, Milton, Wetherell; **Associate Professors:** Beach, Bower, Dalton, Easton, Hu, Lang, Milligan, Sample, Schrader, Schwartz, Wicker; **Assistant Professors:** Brooks, Cohen-Vogel, Iatarola, Luschei, Rutledge; **Faculty Emeriti:** Bender, Bolden, Funk, Gant, Grant, Hale, Jahns, Kannwischer, Kropp, Luebke, Mann, Papagiannis, Rasmussen, Schroeder, Shargel, Snyder, Stakenas, Waggaman, Wallat

The department affirms and strives to fulfill the mission of Florida State University and the College of Education by providing for advanced professional preparation and continuing development of persons who are committed to 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 programs of study are available within the Department of Educational Leadership and Policy Studies:

College Business and Finance
College Teaching
Educational Leadership and Policy
Educational Leadership/Administration
Educational Leadership/Supervision
Educational Policy
Educational Policy and Evaluation
Higher Education
Higher Education General Administration
History and Philosophy of Education
Institutional Research
Modified Program for Educational Leadership
Program Evaluation
Sociocultural and International Development Education Studies
Student Affairs

Admission Requirements

An application for admission, application fee, official transcript from each college attended, and a transcript of Graduate Record Examinations (GRE) scores should be sent to: *Office of Admissions, A2500 University Center, 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, 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,

ECO 5973r. Applied Master's Project (3). Prerequisites: ECO 5114, 5117, 5206, 5208, 5420, 5434, or permission of instructor. As the capstone for the applied master's degree, this project requires students to use theory, research methods, and analytical procedures learned in the program to research an applied economics question. Findings are presented in both oral and written format. The 3-hour project is taken in both 6-week summer sessions, for a total of six (6) semester hours. May be repeated to a maximum of nine (9) semester hours.

ECO 6209. Topics in Macroeconomics (3). This course surveys recent developments in macroeconomic theory with an emphasis on developing research skills in an applied context. Topics include endogenous growth, economic convergence and technological diffusion across countries, money and growth, and modern business cycle theory.

ECO 6936. Topics in Microeconomics (3). Prerequisites: ECO 5115, 5116, or 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). (P/F grade only.)

ECO 8969r. Preliminary Doctoral Examination (0). (P/F grade only.)

ECO 8976r. Master's Thesis Defense (0). (P/F grade only.)

ECO 8985r. Dissertation Defense (0). (P/F grade only.)

ECP 5115. Seminar in the Economics of Population (3). Theoretical and empirical treatment of the determinants of demographic behavior in less and more developed nations, the economic consequences of the behavior, and implications of both sets of findings for population and economics policy.

ECP 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 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 5606. Urban and Regional Economics (3). Prerequisites: ECO 2023. This course introduces students to the evolution of cities, along with issues with which cities and regions must deal (e.g., sprawl, pollution, congestion, transportation, poverty, housing and neighborhood development, public finance) to be examined from an economic perspective. The content lays the foundation for an analysis of policy alternatives to deal with these issues.

ECS 5005. Seminar in Comparative Economic Systems (3). Utilization of basic economic tools and concepts to analyze efficiency and optimality considerations of various economic systems. Both theoretical models of economic systems and actual case studies will be utilized.

ECS 5015. Economic Development: Theory and Problems (3). Overall determinants of pace and structure of development, and specific issues, e.g., industrialization, human resources, foreign sector, income distribution, rural development, technology, etc.

ECS 5335. Economies in Transition (3). Prerequisites: ECO 2013, 2023. The analytical focus of this course is concentrated on the most important features of transition from centrally planned command economies toward market economic systems.

**ECONOMIC PROBLEMS AND POLICY:
see Economics**

**ECONOMIC SYSTEMS AND DEVELOPMENT:
see Economics; Latin American and Caribbean Studies**

**EDUCATIONAL ADMINISTRATION/LEADERSHIP:
see Educational Leadership and Policy Studies**

social sciences and education, or foundations of education; 2) a résumé providing a record of the applicant's educational and work history; 3) letters of recommendation from three persons who know the applicant's educational and/or professional background and believe that the individual will be making an appropriate career commitment by enrolling in an educational leadership and policy studies program at Florida State University; and 4) a combined score on the quantitative and verbal portions of the GRE. **All applicants must present a GRE score prior to the time of admission.** Foreign nationals whose native language is not English must present a minimum score of 550 on the TOEFL examination. Students should visit <http://www.fsu.edu/~elps/> for specific admission information for each program.

EDUCATIONAL LEADERSHIP AND POLICY

Programs within educational leadership and policy are focused on the preparation and continuing development of educational leaders who can act effectively and ethically and are committed to the study and implementation of educational policy at every level. The department continues to build upon long-standing traditions of innovative research, well-known faculty, and nationally-recognized programs to provide students with some of the best resources available.

Educational Leadership/Administration

The program in educational leadership/administration offers a number of master's, doctoral, and specialist programs focusing on one central goal: to develop and enhance dynamic, high-performing leadership for the renewal and improvement of schools and school systems. The master's program, one of the college's distance learning (online) degree programs, prepares students for entry-level administrative positions in schools, school districts, and educational agencies, while the doctoral programs provide much more advanced study opportunities geared toward higher-level administrative roles. The two doctoral programs are differentiated by their purposes: the EdD program is designed for the professional practitioner, while the PhD is intended for those wishing to enter academic research roles. The specialist program serves as a post-master's program for experienced educators who seek to develop their leadership potential and competency.

A separate program offered through educational leadership, the modified program for education leadership (Level I), allows students to partially fulfill the requirements to obtain Level I Certification in the state of Florida. Available through FSU's distance learning (online) program, it operates much like a degree-seeking program but has been modified specifically for the purpose of Level I preparation. Students must have a master's degree prior to being admitted. Information is available at <http://www.fsu.edu/~elps/ela/index.html>.

Educational Policy and Evaluation

The program in educational policy and evaluation prepares individuals for policy-related careers that involve designing, developing, implementing, analyzing, and evaluating federal, state, and local educational policies. It can also prepare students to teach at the university level. The program incorporates a core of policy and evaluation courses with classes in the humanities, social sciences, and basic research methods. At the doctoral level, students are required to complete a strong core of courses in advanced research methods in addition to policy and evaluation courses. The master's degree in program evaluation is designed to prepare individuals for a broad array of career opportunities related to the process and use of evaluation in a wide variety of contexts (education, government, foundation, or corporate venues). The master's program in educational policy offers training for students working in or contemplating careers at institutions of higher education, elementary and secondary education, or state and national agencies working in educational policy.

Two certificates that provide graduate-level training for professionals and graduates students are also available. The certificate in program evaluation provides training in the basic concepts and skills necessary to conduct formative and summative evaluations of educational or social service programs and program improvement efforts. The certificate in educational policy provides the necessary skills to carry out effective policy planning, analysis, implementation, and evaluation that respond to current issues in educational policy. Information is available at <http://www.fsu.edu/~elps/epse/index.html>.

History and Philosophy of Education

The program in history and philosophy of education emphasizes the examination of educational issues from the disciplinary perspectives of history and philosophy at the master's, specialist, and doctoral degree levels. Students are expected to acquire skills in research methods in history or philosophy, participate in inquiry and debate on policy issues in American education, and complement their work within the program with courses in the cognate disciplines in the College of Arts and Sciences. Graduates of the program often enter teaching and research positions in history or philosophy of education, and many pursue policy-making positions in schools, governmental agencies, and other policy-oriented organizations. Information is available at <http://www.fsu.edu/~elps/hpe/index.html>.

Sociocultural and International Development Education Studies (SIDES)

With master's and doctoral degree programs, SIDES supports scholarly and critical inquiry into the social and cultural processes of education in the US and in international development contexts. Both degrees provide in-depth training in one or more social science disciplines, qualitative and quantitative research methodologies, and a professional specialization in one or more areas of educational practice. Faculty, alumni, and students are active in conducting research or participating in educational activities around the world. Graduates of the program are found in numerous positions including academic research and teaching, educational planning, project design and evaluation, program management in foundations, non-governmental organizations, governmental organizations, and private and public educational institutions. Geographic areas currently represented by faculty include Africa, South Asia, Southeast Asia, Latin America, and the US. Information is available at <http://www.fsu.edu/~elps/sides/index.html>.

Definition of Prefixes

- ADE—Adult Education
- CGS—Computer General Studies
- EDA—Education: Administration
- EDG—Education: General
- EDF—Education: Foundations
- EDM—Education: Middle School
- EDS—Education Supervision
- EME—Education: Technology and Media
- EVT—Education: Vocational/Technical

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 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 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 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 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).** (P/F grade only.)
- ADE 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- ADE 8968r. Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- ADE 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- ADE 8978r. Specialist in Education Thesis Defense (0).** (P/F grade only.)
- ADE 8985r. Dissertation Defense (0).** (P/F grade only.)
- CGS 5310. 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 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 institution, public education. Using concepts based in the discipline of political science, the course explores how ideologies, institutions, and social groups have interacted to shape formal schooling in the United States. Class discussions and readings will focus on the distribution of power and leverage in the political process of American society and the utilization of communication and analytic skills by educational administrators and policy analysts.
- EDA 5422. Applied Data Analysis and Assessment of Educational Leaders (3).** This course provides participants with skills and knowledge in using the results of screening, diagnosis, progress monitoring and outcome reading assessments to guide instructional decision-making in grades K–12, as described in Florida's Reading Program Specification 3.3 and 3.4. Topics include assessment-driven intervention, including the selection of core and supplemental reading programs and appropriate instructional strategies.
- EDA 5423. Decision-Oriented Educational Research (3).** Concepts and methods for producing information for the purpose of school improvement.
- EDA 5503. The Principalship (3).** This course provides a systemic approach to address the leadership and management roles, responsibilities, opportunities, and challenges of principals and other building administrators. It promotes a thorough understanding of the interrelationships among the various components of schools and how they must be addressed systemically in order for students and schools to achieve measurable gains.
- EDA 5504. Instructional Leadership (3).** This course examines the ways that school leaders bring multiple resources to focus on curriculum, instruction, and academic achievement. It focuses on how strong instructional leadership is achieved, how school leaders promote and sustain instructional leadership, and what factors undermine instructional leadership.
- EDA 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 6193. Leading Learning (3).** This course presents a rationale, history, and the current research and practice of instructional leadership and the skills required among the students. This investigation takes place within the context of school accountability and federal guidelines.
- EDA 6207. Leadership for School Renewal (3).** Developing catalytic leadership for creating a vision description of total quality school/school district and a strategic plan for realizing that vision.
- EDA 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).** (P/F grade only.)
- EDA 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- EDA 8967r. Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- EDA 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- EDA 8977r. Specialist in Education Thesis Defense (0).** (P/F grade only.)
- EDA 8985r. Dissertation Defense (0).** (P/F grade only.)
- EDF 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 5462. Evaluation of New Educational Programs and Practices (3).** Prerequisite: EDF 5461. Designing and implementing, process, and outcome of evaluation of innovative programs and program components.
- EDF 5464. Qualitative Methods for Program Evaluation (3).** Prerequisite: EDF 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 5488. Computer Analysis of Educational Data (2).** Prerequisite or Corequisite: EDF 5400 or equivalent. Acquaints students with Statistical Package for the Social Sciences (SPSS). Emphasis on editing text on remote terminals, data collection, and management.
- EDF 5517. History of Education in the United States (3).** This course examines the evolution of public and private schooling in the United States from the Spanish and British colonial eras to the modern reform period of the late 20th century. It includes the social history of American teachers, and a critical examination of issues surrounding race, ethnicity, social class and gender in the development of formalized structures of schooling.
- EDF 5519. History of Higher Education (3).** Course provides an in-depth overview of the history of higher education in the role of higher education in society over the last two centuries, the expansion of higher education in the twentieth century to include various groups such as women, African-Americans, and the working-class; tensions between the traditional, liberal arts curriculum and multicultural offerings; and governmental roles in the transformation of modern higher education.
- EDF 5543. Introduction to Philosophy of Education (3).** A survey of contemporary approaches to philosophy of education, such as neo-pragmatism, post-structuralism, feminist theory, critical theory, existentialism and analytic philosophy, emphasizing their perspectives on current educational problems and practices and their methods of investigation.
- EDF 5548. Philosophy of Teaching and Learning (3).** This course introduces the comparative analysis of conceptions of teaching and learning in competing philosophies of education and their implications for education in a culturally diverse democratic society.
- EDF 5551. Social Philosophies and Education (3).** Course examines social and political philosophies such as liberalism, communitarianism, functionalism, critical theory, pragmatism and feminism and their implications for educational policy and practice in a democratic society.
- EDF 5612. Education and Culture (3).** Applications of anthropology in the study of education. Focuses on transmission of culture; cultural factors that promote and inhibit in-school learning; bilingualism and language policy; factors affecting development and policy in education.
- EDF 5624. Economics of Education (3).** This course applies basic economic theory and methods to policy issues arising in schools and universities, including both domestic and international settings. Examples of specific issues include the supply and demand for education, the external benefits of education, the labor market for educators, and the effect of market competition on the performance of educational institutions.
- EDF 5625. Education and Economic Development (3).** An introduction to the role of education in economic development. Topics examined include the relationship of formal and non-formal 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 5897r. 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). Prerequisites: EDF 5612, 5630. Introduction to methods of data collection: qualitative, participant observation, and ethnographic interviews. Attention to strengths and shortcomings for use in educational research and evaluation.

EDF 6479. Qualitative Data Analysis (3). Prerequisite: EDF 6475 or equivalent. This course focuses on the analysis, interpretation and reporting of qualitative data collected during interpretive research.

EDF 6547. Philosophical Foundations of Education Research (3). Prerequisites: Graduate Standing. This course provides a historical and philosophical survey of educational research emphasizing the epistemological and ontological assumptions underlying different theories of and approaches to contemporary educational inquiry.

EDF 6558. Seminar on John Dewey's Educational Philosophy (3). Advanced seminar providing coverage of Dewey's educational thought. Studies Dewey in the context of American pragmatism and educational progressivism.

EDF 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). (P/F grade only.)

EDF 8967r. Master's Comprehensive Examination (0). (P/F grade only.)

EDF 8970r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EDF 8977r. Master's Thesis Defense (0). (P/F grade only.)

EDF 8980r. Specialist in Education Thesis Defense (0). (P/F grade only.)

EDF 8987r. Dissertation Defense (0). (P/F grade only.)

EDG 5250. 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 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.

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 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 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). (P/F grade only.)

EVT 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EVT 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

EVT 8985r. Dissertation Defense (0). (P/F grade only.)

HIGHER EDUCATION

A national leader in its field, the program in higher education offers study at the master's and doctoral levels, as well as certificate programs in college teaching and institutional research. Students pursuing a master's degree may choose from emphases in student affairs, general administration, and college business and finance. Each of the MS program tracks is designed to prepare professionals for entry-level administrative, management, and leadership positions in higher education. The program also offers both EdD and PhD doctoral programs in which students gain advanced knowledge and competency in utilizing analytical skills. The EdD program of study focuses on knowledge and skills associated with the management and administration of postsecondary institutions. The PhD program also provides these skills and understandings as well as in-depth study of research design and methodology. The certificate programs are offered to master's and doctoral students who wish to gain more specialized knowledge in college teaching and institutional research, and are intended to enhance an existing degree program. Information is available at <http://www.fsu.edu/~elps/he/>.

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 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 5089. Black and Latino Education: History and Policy (3).** This course will provide future teachers, educators, policymakers, and others with an understanding of the history and socio-economic context of the educational experience of African-Americans and Latinos. Although the two largest minority groups in the United States, African Americans and Latinos are under-represented among students pursuing advanced course work in high school graduation rates, college completion, and other indicators of academic achievement. This course will explore factors that have impeded academic achievement at the K-12 and university levels, in addition to examining programs that foster success.
- EDF 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 5055. Introduction to Institutional Research (3).** This course provides an introduction to institutional research as discipline in higher education. Course content is addressed within the context of organizational, administrative, political and ethical issues in institutional research. Practical experience with research databases and insights from current practitioners in the field are integrated into the course content.
- EDH 5068. Outcomes of Undergraduate Education (3).** Prerequisites: EDF 5400; 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 5305. College Teaching: Instruction in Higher Education (3).** Classroom and individualized instruction including objectives-oriented instruction, evaluation, student motivation, and media utilization in the college curriculum.
- EDH 5405. Legal Aspects of Higher Education (3).** Comprehensive analysis of legal concepts, procedures, and considerations relevant to higher education.
- EDH 5406. 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 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 6046. Diversity in Higher Education (2).** Analysis of historical and contemporary diversity-related issues in higher education and society.
- EDH 6067. International Perspectives in Higher Education (3).** This course introduces learners to the international and comparative dimensions of higher education. Various topics covered in this course include comparison of higher education systems and the historical roots of the similarities and differences; comparison of the major participants in higher education across nations, with a special focus on the academic professoriate and college students; exchange of people and ideas in the global age; and salient policy issues in higher education from a global perspective, such as access and finance, accountability and quality assurance, and the emergence of entrepreneurial universities.
- EDH 6081. Leadership and Change in Higher Education (3).** Prerequisites: EDH 5051, 6635. Students are introduced to current problems and future opportunities for higher education and develop competencies as higher education leaders, researchers, and practitioners in order to lead higher education in the future. Particular emphasis is placed on the application of change strategies and organizational transformation. Students are introduced to collaborative approaches through the application of synergy, learning teams, and learning communities.
- EDH 6206. College Curriculum: Issues of Philosophy and Development (3).** Prerequisite: EDH 5051 or permission of instructor. This course examines perspectives that shape undergraduate and graduate college curricula. Students in the course analyze the structure and content of curriculum, how faculty teach, how students approach learning, and the dynamics of the curricular change process.
- EDH 6401. Public Policy in Higher Education (3).** Prerequisite: EDH 5051. This course gives graduate students a greater understanding of the process of public policy-making and the impact of public policy on higher education. Topics include the interaction between the states and the federal government and the interconnections between K-12 and higher education.
- EDH 6505. Finance in Higher Education (3).** Prerequisite: EDH 5051. This seminar examines major issues in the financing of higher education in the United States, including major policy issues in higher education finance; the roles of the federal government and states; and institutional budgeting and financial management.
- EDH 6635. Organization and Governance of Higher Education (3).** Prerequisite: EDH 5051. Through case studies, contemporary research and concepts drawn from the literature of organizational theory, students in this course are introduced to management and leadership in higher education and theoretical models applicable to these institutions. Students examine the organizational structure and culture of higher education and the functional attributes of administrative roles, processes of decision making and models of governance and policy-making internal and external to colleges and universities.
- EDH 6935r. Seminar: Literature, Research, and Professional Writing in Higher Education (3).** (S/U grade only.) This course serves to assist graduate students in the preparation of a prospectus. May be repeated to a maximum of six (6) semester hours.
- EDH 6936. Seminar in Student Development Theories (3).** This course gives doctoral students an opportunity to examine leading theories of college student development and the research literature supporting these theories. Students develop the ability to critique and evaluate student development theories and apply theory in higher education settings.
- EDH 6980r. Dissertation (1-12).** (S/U grade only.)
- EDH 8964r. Preliminary Doctoral Examination (0).** (P/F grade only.)
- EDH 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- EDH 8968r. Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- EDH 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- EDH 8978r. Specialist in Education Thesis Defense (0).** (P/F grade only.)
- EDH 8985r. Dissertation Defense (0).** (P/F grade only.)
- 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: Gary Peterson; **Professors:** Becker, Driscoll, Eklund, Keller, Oosterhof, Peterson, Pfeiffer, Reardon, Reiser, Sampson, Seel, Specter, Tenenbaum, Wager; **Associate Professors:** Baylor, Kamata, Kelly, Losh, Prevatt, Proctor, Tate; **Assistant Professors:** Darabi, Dennen, Eceles, Jeong, Li, Olinia, Roehrig, Turner; **Professors Emeriti:** Beard, Branson, Brewer, Burck, Burkman, Dick, Fletcher, Foster, Hills, Johnson, Kaufman, King, Lathrop, Mancha, Morgan, Quinly, Pargman, Tate

The Department of Educational Psychology and Learning Systems is committed to improving human learning and performance in a variety of settings, including schools, universities, adult learning contexts such as government agencies, business, human services, and industry. Specifically, the department seeks to provide service to the college; prepare graduates for leadership roles in universities, school districts, state departments of education, educational research organizations, human service agencies, and private industry; and conduct research designed to expand the knowledge base of our field and improve the quality of education and training.

The following degrees, majors, and certificate programs are offered by the Department of Educational Psychology and Learning Systems:

Combined Doctoral program in counseling psychology and school psychology (D)
 Counseling and human systems (M, S)
 Career counseling
 Mental health counseling
 School counseling
 School psychology
 Educational psychology (M, S, D)
 Learning and cognition
 Sports psychology
 Measurement and statistics
 Instructional systems (M, S, D)
 Certificate in human performance technology
 Certificate in measurement and statistics
 Certificate in online instructional development

Educational Psychology Program

The program offers master's, specialist, and doctoral degrees in three major areas: learning and cognition, measurement and statistics, and sport psychology.

The major in **learning and cognition** is practitioner oriented at the master's level and research oriented at the doctoral level with course work in cognition, learning theory, and research methods. Graduates of this major are prepared to take positions in universities, educational agencies, and research organizations that focus on improving educational practice.

The **measurement and statistics** major is designed to prepare leaders in educational research to serve in the following types of professional positions: educational measurement and educational statistics specialist for a test publisher or governmental licensing, certification, or assessment unit; director of measurement activities for a school or school system; measurement and educational statistics expert for a regional education laboratory; or professor in measurement and statistics at a college or university.

The major in **sport psychology** provides the basis for understanding and influencing the behavior of people involved in sport, exercise, and other types of physical activity. Graduates with this major are prepared to take positions in private practice as well as in college and university settings as teachers, researchers, and performance enhancement counselors to athletes.

Instructional Systems Program

The program offers the master's, specialist, and doctoral degrees in instructional systems with a major in either instructional systems or open and distance learning. The master's and specialist programs provide students the skills necessary to analyze learning and work-performance problems, and to design, develop, and evaluate solutions to these problems. In addition, the doctoral program places a strong emphasis on inquiry and research skills, and requires students to establish expertise by obtaining a minor in a discipline related to instructional systems. Graduates from the instructional systems program are prepared to take positions in universities, business and industry, military and governmental agencies, and public schools.

Admission and Application Information

Applications for admission are received and reviewed at any time during the year, although many programs admit students in the fall semester only.

Minimum requirements for admission to a master's degree program include a grade-point average of 3.0 in the last two years of the undergraduate program and 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

ADE—Adult Education
DEP—Developmental Psychology
EDF—Education: Foundations and Policy Studies
EDG—Education: General
EDP—Educational Psychology
EME—Education: Technology and Media
PET—Physical Education Theory
SYP—Social Processes

Graduate Courses

ADE 5080. Foundations of Adult and Continuing Education (3). Emphasis is on the design and implementation of continuing education.
ADE 5083. Human Resource Development (3). Comprehensive survey of the structure and function of human resource development in organizations. Focus is on alternative perspectives, professional roles and competencies, and organizational features affecting Human Resource Development operations and programs.
ADE 5084. Analytical Applications in Human Resource Management, Training and Development (3). This course focuses on case studies and the analytical skills necessary to evaluate the need for and effectiveness of human resource management, training, and development interventions and business and industry, public and community agencies, and not-for-profit organizations. Students should have a basic understanding of statistics and will practice calculating efficiency, effectiveness, and return on investment formulas.
ADE 5186. Program Leadership Development (3). Principles and theory of program development and appraisal applied to selected adult education enterprises.
ADE 5189. Staff Training and Development (3). Theory and practice of training and staff development based on the design and use of experiential instructional interventions to enhance individual, group, and organizational efforts.
ADE 5380. Processes of Community and Adult Education (3). Focus is on processes of planned change through formal and informal adult and continuing education programs in a variety of community and agency contexts.
ADE 5385. Adult Learning (3). A critical examination of major problems in adult learning. Emphasis given to the psychological factors affecting learning ability, achievement, and motivation through the adult life-cycle.
ADE 5672. E-Learning for Managers (3). This course prepares managers in all types of organizations with the essential principles and practices impacting the e-learning revolution in business and government. Students explore the convergence of e-learning with knowledge management and learning systems, learning content management systems, and performance support systems.
ADE 5932r. Special Topics in Adult Education (1–3). Topical areas vary to focus on current concerns and issues in the field not addressed in other courses. Areas presently offered include: leadership in adult education enterprises, participatory planning research and evaluation, and foundations of HRD policy. May be repeated to maximum of twelve (12) semester hours.
ADE 6676. Human Resource Development Policy Seminar (3). Examines the policy implications of HRD practice and the kinds of reforms in corporate, community, and public life that are required in order to make lifelong learning a reality. Develops the skills of participants in diagnosing social and economic trends, analyzing learning environments in social institutions, and devising new HRD-supportive policy.
DEF 5068. Life-Span Human Development (3). This course discusses central theories and topics in developmental psychology across the life span, focusing especially on the implications of developmental theory and empirical research on counseling and other helping professions.
EDF 5400. Basic Descriptive and Inferential Statistics Applications (4). Descriptive statistics, hypothesis testing, confidence intervals, correlational techniques, and introduction to the general linear model.
EDF 5401. General Linear Model Applications (4). Prerequisite: EDF 5400. Topics included are general linear model applications including multiple regression, ANOVA, ANCOVA, aptitude-treatment-interaction analysis, and other techniques.
EDF 5402. Advanced Topics in Analysis of Variance Applications (3). Prerequisite: EDF 5401 or 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 Assessment (3).** This course prepares prospective teachers for activities related to assessing students including establishing validity evidence, enhancing generalization of observations, using traditional and alternative assessment strategies, interpreting and using data to improve achievement, and utilizing assessment in the process of learning.
- EDF 5432. Measurement Theory I (3).** Prerequisite: EDF 4440 or 5400. Introduction to test theory; mathematical bases for operational procedures; practical applications of theory.
- EDF 5434. Measurement Theory II (3).** Prerequisite: EDF 5432. Prerequisite or Corequisite: EDF 5402 or 5401. An advanced course in the theory, principles, and techniques of measurement.
- EDF 5435. Theory of Scaling (2).** Prerequisite: EDF 5432. Theory and application of 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 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).** (P/F grade only.)
- EDF 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- EDF 8969r. Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- EDF 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- EDF 8979r. Specialist in Education Thesis Defense (0).** (P/F grade only.)
- EDF 8985r. Dissertation Defense (0).** (P/F grade only.)
- EDG 5932r. Seminar in Instructional Design (1-2).** (S/U grade only.) Faculty members and other instructional systems specialists present lectures on current topics and projects.
- EDG 6287. Needs Assessment for Performance and System Planning (3).** Characterization and development of models and procedures for strategic planning, needs assessment, needs analysis, quality management, and front-end analysis, and their use in system planning.
- EDG 6328. Alternate Views of Teaching and Learning (3).** An overview of the empirical and conceptual basis for a variety of viewpoints regarding teaching, learning, and models of instructional design.
- EDG 6362. Instructional Systems Research Seminar (3).** This course aims to heighten students' awareness of the critical issues in instructional systems. It will examine how research methodologies have been used to study these issues, will explore how research programs and theories are progressively honed, and will help students begin to define programmatic areas of disciplined inquiry.
- EDG 6363. Practicum in Experimental Learning Research (3).** Prerequisites: EDF 5400, 5481. Provides instruction and practice in planning, conducting, and describing (both orally and in writing) experimental research.
- EDG 6925. Instructional Materials Development (4).** Prerequisites: 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).** Examination and application of prominent contemporary theories of learning, cognition, and information processing to instructional settings.
- EDP 5217. Principles of Learner Motivation (3).** Study of theories and concepts of human motivation. The primary emphasis is on the motivation to learn and techniques for stimulating and sustaining learner motivation.
- EDP 5275. Development of Children in School (3).** This course discusses central theories and topics in developmental psychology across the life span, focusing especially on the implications of developmental theory and empirical research on counseling and other helping professions.
- EDP 5285. Group Processes in Instruction (3).** Theory, research, and practice in interpersonal interaction, group dynamics, and management of group processes in the classroom and school setting. Topics include group development, leadership, conflict management, organizational dynamics, values.
- EME 5054. Educational Technology: Theory and Practice in Instruction (3).** Course focuses on the current theories and practices of using technology in teaching and learning. Students participate in a computer supported learning environment and integrate theory and technology into their practices.
- EME 5405. Media, Text, and Technology (3).** This course covers what media can and can not do, about texts that can be produced and disseminated and about the technologies that help and hinder the process of understanding.
- EME 5457. Introduction to Distance Learning (3).** This course provides an overview of the foundations of distance learning and online educational programs. It examines the design and technologies necessary for quality interactive education at a distance.
- EME 5601. Introduction to Instructional Systems (3).** Overview of systems theory applied to instructional systems development, includes principles and procedures for developing total instructional systems.
- EME 5603. Introduction to Systematic Instructional Design (3).** An introductory course in the systematic design of instruction. Includes practical experience in developing and evaluating instructional materials.
- EME 5604. Designing Instructor-Led Courses (3).** Prerequisite: EME 5603 or EDG 6925. Procedures for the design and development of instructor-led courses.
- EME 5608. Trends and Issues in Instructional Design (3).** Overview of the field of instructional design and technology. Includes historical perspective, research findings, and current issues and trends.
- EME 5906r. Directed Individual Study (1-3).** (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.
- EME 5975. Portfolio Review for Certificate Program in Online Instructional Development (0).** (S/U grade only.) Students prepare a portfolio demonstrating that they are skilled in the use of distance learning strategies and technology.
- EME 6403. Designing for Online Collaborative Learning (3).** Prerequisite: EME 5601. This course teaches strategies and techniques for designing instructional activities for distance learning based on theories and principles of collaborative learning.
- EME 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).** Procedure for the design of electronic support tools. Each student will conceptualize, design, and develop a prototype for an electronic performance support tool.
- EME 6616. Case Studies in Instructional Systems (2).** Study of representative contemporary instructional delivery systems, their planning, development, and implementation.
- EME 6631. Managing Instructional Development (3).** Introduction to procedures for managing instructional development projects and organizations. Includes project and organizational design and development, staff development, and leadership principles.
- EME 6635r. Seminar in Advanced Instructional Systems Problems (1-3).** Offered periodically. Addresses special topics that are not covered in other courses. May be repeated to a maximum of six (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 non-training needs. Projects include needs assessment, analysis, solution selection, and job and task analysis.
- PET 5054C. Motor Skill Learning (3).** Research and theory of learning, performance, and related factors as applied to motor skills.
- 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 socio-cultural foundations of play, games, sport, and physical activity.
- PET 5390r. Measurement in Sport and Exercise Psychology (3).** Prerequisites: EDF 5400, 5432, or equivalent. This course considers the application of measurement theory to the domains of sport and exercise psychology. Currently available instruments are reviewed and scale development emphasized.
- PET 6217. Stress and Motor Performance (3).** Emphasizes the importance of stress within motor performance. Examines various physiological, cognitive, and behavioral correlates of psychologically induced stress as well as contemporary treatment modalities for managing stress.
- SYP 5105. Theories of Social Psychology (3).** Surveys the major theoretical orientations predominant in the area of contemporary social psychology. The primary focus of this exploration will be the broad theoretical approaches to social psychology which have emerged over the last several decades. Additionally, a number of derivative theories from the general approaches will be examined. The primary goal of the course is to familiarize students with the major theoretical orientations of relevance to social psychology within which a number of more delimited theoretical models have intellectual roots. Such orientations as cognitive theory, behavioral theory, interactional theory, and the humanistic perspective will be discussed.

PSYCHOLOGICAL SERVICES IN EDUCATION

Coordinator: Frances Prevatt

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, a combined specialist in education (EdS) and master of science (MS) in counseling and human systems.

Combined Program in Counseling Psychology and School Psychology (PhD)

The doctoral degree in the combined program in counseling psychology and school psychology prepares students for professional positions as university faculty, counseling psychologists in university counseling centers, school psychologists in educational settings, mental health care providers in community, medical, and business settings, administrators in public and private agencies, and researchers, evaluators, and planners of human service programs.

Students 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 Florida State University is accredited by the American Psychological Association as a Combined Professional Program in Counseling Psychology and School Psychology.

Counseling and Human Systems (MS/EdS)

The combined specialist/master's degree in counseling and human systems is designed to prepare individuals for professional positions at various levels in elementary and secondary schools, junior colleges, institutions of higher education, or in a wide variety of mental health agencies (e.g., substance abuse, career counseling, adult and child counseling). The combined specialist/master's degree includes a minimum of seventy-two (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, and/or mental health 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 certification by the state Department of Education and Florida licensure as a school psychologist.

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. School psychologist services are offered to members of the community in the Adult Learning and Evaluation Center, which is housed in the Human Services Center. Here students receive direct faculty supervision as part of their clinical training.

The **Adult Learning Evaluation Center** is a not-for-profit assessment center that provides low cost psycho-educational evaluations for college students and other adults who may be experiencing scholastic difficulties due to a possible Learning Disability or Attention Deficit Hyperactivity Disorder. The clinic staff consists of faculty members, licensed psychologists, a clinical director, and graduate students in the specialties of school and counseling psychology. In addition to evaluation services, the center provides educational workshops and individual client coaching and maintains an ongoing research and training function.

The **Center for the Study of Technology in Counseling and Career Development (Tech Center)** assists practitioners, researchers, software developers, and policy makers in improving the design and use of computer applications in counseling and career development. The Center also assists practitioners, researchers, and policy makers in improving the cost effectiveness of career services. Our Web site <http://www.career.fsu.edu/techcenter/> expands this mission to include serving individuals and students interested in career development and computer technology.

Admission Requirements

All applicants must at least meet the minimum State Board of Education requirements for undergraduate grade point average and/or Graduate Record Examinations scores. Each degree offering may set different standards for admission based on programmatic objectives and the applicant pool. A formal application for graduate study must include the following: 1) official graduate application to Florida State University (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, 307 Stone Building, Florida State University, Tallahassee, FL 32306-4453.*

Definition of Prefixes

- MHS—Mental Health Services
- PCO—Psychology for Counseling
- PSB—Psychobiology
- SDS—Student Development Services
- SPS—School Psychology

Graduate Courses

Psychological 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 5007. Foundations of Mental Health Counseling (3).** This course provides a history and overview of the counseling profession, including ethical and legal issues, controversies in the field, and the impact of contemporary problems on mental health problems.
- MHS 5010. Foundations of School Counseling (3).** This course is an introduction to the field of school counseling with an emphasis on historical foundations, role and function, legal and ethical issues, and standards of practice. It provides a theoretical and practical orientation to applied counseling practice in the schools.
- MHS 5060. Psychosocial and Multicultural Aspects of Counseling (3).** Examines the relationship among psychological, social, environmental, disability, and multicultural factors as they pertain to understanding human behavior.
- MHS 5310. Counseling Technology and Information Systems (3).** Understanding and utilizing multimedia information systems in career development. Basic understanding of career development in the life cycle.
- MHS 5340. Foundations of Career Development (4).** Examines the career development of individuals and the process of career counseling and guidance.
- MHS 5341. Career Development Program Design and Evaluation (3).** Examines contemporary career interventions and strategies for program development and implementation.
- MHS 5400. Introduction to Counseling Theories and Techniques (4).** Examines traditional theories of personality and counseling, as well as how to translate theory into effective practice. Develops basic counseling skills that include an awareness of self and a capacity to use one's self in the counseling process.
- MHS 5419. Systems Approach to Counseling (3).** Conceptualizes counseling problems in systems terms; focus is on counselor and client as part of systems; systems-level counseling interventions.
- MHS 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 (1–4). Intensive practice in counseling, consisting of closely supervised practical experience and critique of students practice. May be repeated to a maximum of sixteen (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 6946r. Field Practicum in Counseling Psychology (2–16). (S/U grade only.) Prerequisite: MHS 6805. This practicum provides students with an opportunity to integrate theory and practice in the delivery of psychological services relevant to their career goals. Students completing the course enhance their competencies in assessment, intervention, or both. May be repeated to a maximum of sixteen (16) semester hours.

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). (P/F grade only.)

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). (P/F grade only.)

MHS 7972r. Specialist in Education Thesis Defense (0). (P/F grade only.)

MHS 8960r. Master's Comprehensive Examination (0). (P/F grade only.)

MHS 8961r. Preliminary Doctoral Examination (0). (P/F grade only.)

MHS 8980r. Dissertation (1–12). (S/U grade only.)

MHS 8981r. Dissertation Defense (0). (P/F grade only.)

PCO 5095. Computer Applications in Counseling Psychology and Other Human Services (3). Examines the effective application of computer technology in counseling psychology with an emphasis on mental health, education, and rehabilitation.

PCO 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 non-standardized approaches, including foci on assessment of achievement and learning, preschool children, special populations, and assessment-based development of educational objectives and plans. Includes activities related to collection, interpretation and reporting of assessment data.

SPS 5193. Laboratory in the Assessment of Socio-Emotional Problems (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 5205. Consultation in the Schools (3). Corequisite: MHS 6410. This course offers instruction and supervised experience in providing consultation to educators who are teaching students with behavioral and/or academic difficulties. Content includes an introduction to indirect models of service delivery, theories of consultation, consultative models, the process of consultation, systems level consultation, and ethics.

SPS 5615. Counseling Children and Adolescents (3). Prerequisite: Permission of instructor. 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: Victor E. DeBrunner ; **Professors:** R. Arora, V. DeBrunner, Foo, Perry, Roberts, Thagard, Zheng; **Associate Professors:** K. Arora, Baldwin, Chang, L. DeBrunner, Harvey, Kwan, A. Meyer-Baese, Tung; **Assistant Professors:** Andrei, Frank, Li, U. Meyer-Baese, Weatherspoon, Yu; **Assistants in Electrical Engineering:** Brooks, Skinner

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.

The PhD program is intended to provide students with an independent mastery of a significant portion of the field of electrical engineering. The PhD program prepares students for a career in industry, research, and/or teaching. Successful candidates must demonstrate, through original research, a substantial contribution to their field of specialty.

Areas of specialization in these programs generally coincide with the research interests of the faculty as indicated in the "Graduate Faculty" chapter of this *Graduate Bulletin*. Current specialization areas supported include computer engineering, VLSI, computer security, electromagnetics, communications, digital signal processing and controls, power systems, robotics, and microelectronic engineering.

Facilities and Research Programs

Center for Advanced Power Systems

The Center for Advanced Power Systems (CAPS), initially funded by the Office of Naval Research (ONR), is the preeminent center for multidisciplinary research, development and education for advanced electrical power technologies serving transportation and utility systems. The Center has developed an academic-industrial consortium focused on recent advances in power semiconductors, materials, advanced controls and superconductivity applied to power system technologies. CAPS is developing a national resource in power systems technology that is built around an extensive simulation capability which will provide both off-line and real-time simulation of power systems with major hardware-in-the-loop capability.

Major equipment and facilities include a multi-unit RTDS system, a 5-MW dynamometer, a 5-MVA AC-DC-AC converter, a 200-kV impulse laboratory, a superconductor ac-performance evaluation laboratory, and a multi-agent industrial control laboratory.

Machine Intelligence Laboratory

The Machine Intelligence Laboratory with funding from the Department of Defense focuses on research in the areas of computer vision, pattern recognition, data mining, field-programmable-gate-array (FPGAs) for parallel computations, neural networks, evolutionary algorithms, biologically-inspired systems, and evolvable random number generators.

Applied Laser Laboratory

Applied Laser Laboratory involves development of novel materials for specific applications. The lab aim is fundamental and applied research in areas including nano-structural materials and solid thin films

growth and characterization, and photonic and chemical sensors fabrication and modeling. The accomplishments include development of metal oxide semiconductor nanobelts, insulator-semiconductor-superconductor thin films, wideband photodiodes, and chemical nano-sensors. The lab is equipped with excellent facilities including a pulsed laser deposition system consisted with an excimer laser and a vacuum chamber with multi-target rotator and RHEED probe.

Power Sciences Laboratory

Power Sciences Laboratory is a fully equipped facility for conducting new energy sources development, and involves development of high energy and high power densities power sources including fuel cells, batteries, ultracapacitors, and hybrid power devices. The accomplishments include development of highest energy and power densities ultracapacitors, a method for enhancing the dielectric breakdown strength of polymer films, and novel monolithic hybrid fuel cells. The fundamental research includes understanding of the capacity degradation mechanisms in Li-ion and Li-polymer rechargeable batteries and development of theories for energy density of ultracapacitors and hybrid capacitors. The lab is equipped with four battery test systems, a fuel cell test system, an impedance spectrometer, electronic load, surface analyzer, and glove box.

Electromagnetics Research Laboratory

The Electromagnetics Research Laboratory is a comprehensive research facility involved in studies of electromagnetics with emphasis on optical fiber technology and millimeter waves. The optics area of the laboratory is investigating fiber-optic sensors and switches, high-resolution imaging systems, opto-mechanical and interferometric sensors, and optical fiber characterization. The millimeter waves area is researching contactless material characterization, beam waveguides and open resonator techniques, mechanical and interferometric sensors, quasi-optics, and bioelectromagnetics. Other activities include microwave circuits and striplines, slot-lines, and antenna arrays. The laboratory is equipped with high-quality optical equipment including a precision reflectometer, an optical spectrum analyzer, lasers, detectors, power meters, optical benches, and translation gauges. The millimeter waves area has several state-of-the-art W-band (80 to 110 GHz) millimeter-wave sources, a high-resolution spectrum analyzer, detectors, and support equipment.

High-performance Computing and Simulation Research Laboratory

The High-performance Computing and Simulation (HCS) Research Laboratory focuses on research in advanced computer architectures, networks, systems, services, and applications for critical applications in reconfigurable, parallel, distributed, and fault-tolerant computing. This multi-university laboratory is headquartered in the ECE Department at the University of Florida (HCS-Gainesville), with the FAMU-FSU College of Engineering (HCS-Tallahassee) participating as a partner lab site. Both sites house key facilities linked by the Florida Lambda Rail. The lab has been cited by the NSA as a Research Center of Excellence in High-Performance Computing and Networking.

Activities focus on core areas in high-performance computer engineering whose contributions are critical for scalable, high-performance, dependable, and secure communications and computations far into the new century. Researchers address key issues that span the entire spectrum, from low-level hardware to grand-challenge applications, in a manner that emphasizes both theoretical and applied research to bring to fruition new concepts, models, techniques, and tools.

Information Processing & Transmission Engineering Research Laboratory

The research activities of the IPTEL group are oriented toward the convergence of information sensing, processing, and transmission. The goal is to address the many technical challenges in the design of seamless and integrated wireless sensors for practical applications. The latest research efforts are focused on two key areas: wireless sensor networks and signal processing. The thrust of the wireless sensor networks research efforts is to develop intelligent wireless sensor networks that exhibit swarm behavior. The main research topics currently being investigated include architectures, optimal protocols, data privacy, and fault tolerance for swarm-intelligent wireless sensor networks. The thrust of the signal processing research efforts is to

develop innovative signal processing techniques and algorithms suited for automatic target detection, classification, and tracking. The emphasis is placed on approaches that are based on physical principles, detection theory, statistical techniques, multi-resolution signal processing, neural networks, genetic algorithms, and swarm intelligence.

Sensor Systems Research Laboratory

The Sensor System Research Laboratory is currently engaged in radar, sonar and electromagnetic projects. Past projects have included radome design, radar target modeling, target detection and classification, target imaging, high-frequency scattering using the geometric theory of diffraction, radar absorbing materials, underwater mine detection using finite elements, synthetic aperture sonar simulators, signal processing, beam forming and ocean bottom imaging. Recently, the lab has been involved in radar signal design, SAS motion compensation and dust particle charging in the Martian atmosphere.

Wireless Intercommunication Laboratory

The Wireless Intercommunication Laboratory, initially started and funded by the NASA Kennedy Space Center, studies wireless voice and data communication as an extension of the existing digital intercommunication system. The research engaged in the laboratory includes wireless communication systems, real-time embedded digital signal processing, spread-spectrum rapid synchronization, wireless network protocols and error control coding. Other research conducted in the laboratory has focused on reliability of wired and wireless communication systems in the high lightning environment of the state of Florida.

The department also is an active contributor to the Florida Engineering Education Delivery System (FEEDS), which provides graduate education throughout the state of Florida using tutored videotape. A two-way television link between the College of Engineering and the Florida State University Panama City campus provides live, interactive instruction for students in the Panama City area and allows students in Tallahassee to benefit from faculty teaching on the Panama City campus.

Financial assistance often can be provided for graduate students through teaching or research assistantships and tuition fee waivers. Teaching assistantships involve assisting in the supervision of laboratory courses grading and related duties. Students awarded research assistantships participate in departmental or externally sponsored research projects under the guidance of a faculty member. Selection is competitive and is based upon potential for teaching (including language skills), Graduate Record Examinations (GRE) test scores, grade point average (GPA), and recommendations. Application for departmental financial assistance should be made directly to the graduate coordinator in the Department of Electrical and Computer Engineering.

Master of Science

The department offers both thesis and non-thesis options for the master of science (MS) degree. The program includes common core courses, major depth concentration, and breadth in electrical engineering. A minimum of thirty (30) semester hours of course work and thesis are required for the thesis option, and thirty-three (33) semester hours of course work and master's comprehensive exam are required for the non-thesis option.

Admission

To be considered for admission, candidates must have earned a bachelor of science degree (or equivalent) in electrical engineering, or a closely related discipline, from an Accreditation Board of Engineering and Technology (ABET) approved program, a grade point average (GPA) of at least 3.0 on a 4.0 scale for all work attempted beyond sixty (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 and Course Work Requirements (Thesis Option)

All master of science (MS) thesis program students must complete a written thesis. Upon completion of the thesis, an oral defense is required, which consists of a public presentation of the student's work to the department and the student's supervisory committee. Students must register for EEL 8976, Master's Thesis Defense, before the defense presentation.

Students pursuing the thesis track must complete a minimum of thirty (30) semester 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, nine (9) semester hours from the department's list of required graduate courses, three (3) 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. Up to six (6) semester hours of 4000-level courses can be completed on an S/U basis. The master's degree candidate may also be permitted to take up to six (6) semester hours of 4000-level courses for letter grade credit beyond those required for a baccalaureate degree with the approval of the ECE graduate coordinator.

Students must identify their major professors by the end of the first semester of 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) thesis program 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.

Supervisory Committee

The supervisory committee for a master's degree thesis program student consists of a minimum of three (3) members of graduate faculty who hold master's directive status. At least half of the committee members must be faculty members from the ECE department.

Master's Thesis Defense Announcement

It is the student's responsibility to post the thesis defense announcement within the department and the College of Engineering at least one week prior to the defense. The announcement should include: thesis title; student's name; student's department; major professor and committee members; date time and location of student's defense.

Course Work and Master's Comprehensive Exam Requirements (Non-Thesis Option)

All students in the non-thesis MS degree program must submit a formal request to obtain an official approval from his/her adviser (if applicable) and the ECE graduate coordinator to be exempt from the thesis requirement. The non-thesis option requires that the student complete a minimum of thirty-three (33) semester hours of graded course work beyond the baccalaureate degree. A minimum of three (3) hours must be a course in advanced mathematics, typically a 5000-level course. Students choosing the non-thesis option must register for and successfully pass the required Master's Comprehensive Exam, EEL 8966. One (1) repeat attempt will be permitted.

Transfer Credits

A maximum of six (6) semester hours of letter-graded graduate course work may be transferred from another academic institution(s), with the approval of the ECE Graduate Committee. A grade of "B" or better is required in all transferred course work.

Graduate Seminar Requirement

All full-time master of science (MS) degree candidates are required to enroll in the graduate seminar, EEL 6932r, for each semester that they are enrolled in the graduate program. The details of the seminar are given below under 'Graduate Courses.'

Doctor of Philosophy

Admission to the Program

A bachelor's or master's degree in electrical engineering or a closely related discipline from an ABET-accredited institution is required for admission to the PhD program; international students may have a master's degree from a recognized international institution. A GPA of 3.3/4.0 on all baccalaureate course work 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 post-baccalaureate study, be required to take a departmentally administered diagnostic examination. It will be designed to appraise the student's ability to pursue the doctor of philosophy degree in the field and to facilitate counseling in the development of the student's program of studies.

Admission to Candidacy

The PhD program is divided into two parts: namely, requirements for a student to be formally admitted to candidacy for the degree, and requirements to satisfactorily complete the degree program.

In order to formally become a candidate and pursue research for the PhD degree, students must have demonstrated that they have a sufficient academic foundation in electrical engineering, an understanding of the research process, and that they are knowledgeable enough about their chosen field of research to proceed with a reasonable assurance of success. If the student is successful in demonstrating these attributes, then the student may be admitted to candidacy for the PhD degree, and may begin formal research leading to the dissertation. The elements of this process are the following:

Doctoral Preliminary Examination

This examination is intended to determine the student's academic preparation for the PhD degree. It consists of a written examination covering the field of electrical engineering, including the areas of communications, digital systems, electromagnetics, electronics, power systems, signals and control. The exam should be taken during the second semester after admission to study for the PhD. The student must apply to take the examination in the Department of Electrical and Computer Engineering office by the end of the prior semester. One repeat attempt will be permitted. The examination must be passed within twenty-four months after beginning study for the PhD. Upon satisfactory completion of the doctoral preliminary examination, and upon the recommendation of the supervisory committee, the student will be formally admitted to candidacy for the doctoral degree. Registration for dissertation research then is permitted.

Dissertation Proposal and Prospectus Examination

After successfully completing the doctoral preliminary examination, completing the requirement for supervised research, and substantially completing all required courses, the student will prepare and present to the supervisory committee the proposed dissertation topic.

The oral examination is given to the student at the time of the presentation of the prospectus or proposed dissertation research area and topic.

This examination will establish whether or not the student has sufficient expertise in the selected dissertation area to proceed with the planned research. One repeat attempt will be permitted.

Dissertation

The dissertation must be an achievement in original research constituting a significant contribution to knowledge, and must represent a substantial scholarly effort by the student. Upon completion of the dissertation, an oral defense is required, which consists of a public presentation of the work to the department and the supervisory committee. Students must register for EEL 8985r, Dissertation Defense, before the defense presentation. If the defense is satisfactory, the committee may then recommend award of the degree. Publication of the complete dissertation is required. This may be done in scholarly journals, or via University Microfilms.

Course work Requirements

A doctoral degree candidate in electrical engineering must complete a total of seventy-two (72) semester hours of course work beyond those applied to the satisfaction of a bachelor's degree:

1. Completion of a minimum of thirty-six (36) semester hours beyond those applied to the satisfaction of the undergraduate degree. 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 course work requirements must be 5000-level or above. These also must include nine (9) semester hours from the department's list of required graduate courses, and 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 toward 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.
3. Completion of thirty-three (33) semester hours (minimum) of dissertation research, EEL 6980r.

Supervisory Committee

The supervisory committee for a doctoral degree candidate consists of a minimum of three (3) members of graduate faculty who have obtained doctoral directive status, one of whom is a representative-at-large of the graduate faculty drawn from outside the ECE department. Additional members may be appointed if deemed desirable. All members of the committee must hold at least the master's directive status. The major adviser or the co-adviser must be from the ECE department. At least half of the committee members must be graduate faculty members from the ECE department.

Dissertation Defense Announcement

It is the student's responsibility to post the dissertation defense announcement within the department and the College of Engineering at least one week prior to the defense. The announcement should include: dissertation title; student's name; student's department; major professor and committee members; date, time, and location of student's defense.

Transfer Credits

A maximum of thirty (30) semester hours of letter-graded graduate course work may be transferred from another academic institution(s), with the approval of the ECE Graduate Committee. A grade of "B" or better is required in all transferred course work.

Graduate Seminar Requirement

All full-time PhD candidates are required to enroll in the graduate seminar, EEL 6932r, for each semester that they are enrolled in the graduate program. The details of the seminar are given below under 'Graduate Courses.'

Journal Paper Submission Requirement

All PhD students are required to publish, or submit and have under review at least one refereed journal article to a journal in their field of interest before their graduation will be approved.

Note: The graduate program in electrical engineering continues to evolve. Candidates are urged to contact the department to obtain the latest information regarding requirements and courses.

Definition of Prefixes

EEE—Engineering: Electrical and Electronic

EEL—Engineering: Electrical

Graduate Courses

EEL 5352. Analysis of Quantum Scale Semiconductor Devices (3). Prerequisite: graduate standing or instructor permission. This course presents techniques for the analysis and simulation of nanometric scale semiconductor devices (SD), with focus on the analysis of quantum induced effects on the electronic transport and characteristics of SD. Topics include generation-recombination processes in semiconductors, quantum and semiclassical modeling of SD, noise and fluctuations in SD, and numerical techniques for the simulation of SD.

EEL 5025. Computational Electrical Engineering (3). Prerequisites: CGS 3408; EEL 3135, 3300, 3472, 3512. The course covers a broad range of computational methods and their applications to electrical engineering. Methods include solution of equations, matrices, differentiation, integration, solution of differential equations, Fourier analysis, and boundary-value problems. Applications include circuit analysis, signal processing, electromagnetics and optics.

EEL 5173. Signal and System Analysis (3). Prerequisite: EEL 3135 or 4652. Continuous and discrete dynamic models with an emphasis on state variable models; Laplace transform, z-transform, and the time domain solutions. Includes real-time digital simulation and sampling theory.

EEL 5247. Power Conversion and Control (3). This course introduces solid-state power conversion and control circuits, including analysis and design of nonlinear multiple-phase circuits with sinusoidal and non-sinusoidal variables; constant-frequency and variable-frequency input converters; variable-frequency inverters; sensing and processing circuits supporting control systems; and embedded microprocessor control systems.

EEL 5250. Power Systems Analysis (3). This course examines power system planning and operational problems. Subjects covered include load flow, economic dispatch, fault studies, transient stability, and control of problems. System modeling and computer solutions are emphasized through class projects.

EEL 5270. Power System Transients (3). Prerequisite: EEL 4213. Electrical transients in power systems; study of time domain, frequency domain and traveling wave techniques for transient analysis; study of switching transients associated with loads, capacitors, faults, line reclosing and single-pole switching; study of interaction between lighting and power systems; introduction to insulation coordination.

EEL 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). Prerequisites: EEL 3135, 3300. 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, converter controller design, power semiconductor device, and converter 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). Prerequisites: EEL 3473, 3512. This course introduces basic concepts of sonar systems including acoustic propagation, transducers and projectors, target strength, reverberation, beamsteering, beamforming, beam patterns, and synthetic aperture sonar.

EEL 5426. RF/Microwave Circuits I (3). Prerequisite: graduate standing or permission of instructor. Introduction to passive RF/microwave circuit design. Topics include distributed transmission line theory; lumped circuit and network analysis; impedance matching; and the design of various microwave components such as filters, couplers, detectors and mixers.

EEL 5427. RF/Microwave Circuits II (3). Prerequisite: graduate standing or permission of instructor. Active RF/microwave design. Topics include two-port characterization of RF/microwave transistors; matching networks; RF/microwave transistor amplifier design using low-noise, high-gain, broadband and high-power design methods; and RF/microwave transistor oscillator design.

EEL 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; black-body 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; arrays-uniformly spaced, non-uniform, pattern synthesis; cylindrical antennas and arrays; radiation from conical and spheroidal structures; slot antennas; open waveguides and small horns.

EEL 5486. Advanced Electromagnetic Theory (3). Prerequisite: EEL 3473. Advanced concepts and theorems in electromagnetic fields; plane, cylindrical, and spherical wave functions; perturbation and variational techniques; microwave networks.

EEL 5500. Digital Communication Theory (3). Prerequisite: EEL 4514. Principles of modern digital communication systems including pulse-code modulation, error-control coding, optimal signal protection, and information theory.

EEL 5542. Random Processes (3). Prerequisite: EEL 3135, 4021. Random processes; analysis and processing of random signals; modeling of engineering systems by random processes; selected applications in detection; filtering; reliability analysis; and system performance modeling.

EEL 5547. Radar (3). This course introduces basic concepts of radar systems including radar range equation, radar cross section calculations, random processes and noise, array antennas, beamsteering, and doppler and range processing. FM and CW systems, pulse compression, synthetic aperture radar, and clutter also are covered.

EEL 5563. Optical Fiber Communications (3). Review of the characteristics of basic optical components for optical communications systems, e.g., optical fibers, light sources, optical detector and fiber connectors; signal degradation in optical fibers; optical analog and digital communication systems; coherent optical fiber communications.

EEL 5590. Advanced Topics in Communication (3). Prerequisites: See department. This course is designed to provide an in-depth knowledge of some of the advanced topics in communications. Topics covered include ideal communication systems; signal to noise ratio (S/N) for amplitude and angle modulation; design of systems to improve S/N ratio; satellite and mobile communication.

EEL 5591. Wireless Communications (3). Prerequisites: EEL 3135, 4021, 4514; "C" programming or equivalent. This course covers the fundamentals of wireless communications and systems. The core topics include radio-wave propagation characteristics of wireless channels; modulation and demodulation techniques for mobile radio; reception techniques for wireless systems; fundamentals of cellular communications; multiple access techniques; wireless networking; and hybrid networking of a wireless system and the Internet.

EEL 5617. Multivariable Control (3). Prerequisite: EEL 4652. Course covers H₂ and H_∞ 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). Prerequisite: EEL 4810. This course is designed to provide students with an in-depth knowledge of advanced topics in neural networks such as universal approximation networks, transformation-based neural networks, information theoretic models, and foundations of neurodynamics.

EEL 5905r. Directed Individual Study (1-3). Prerequisite: Graduate standing. May be repeated to a maximum of six (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 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 (1-9). (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). (P/F grade only.) May be repeated one (1) time.

EEL 8966r. Master's Comprehensive Examination (0). (P/F grade only.) May be repeated to a maximum of two (2) times.

EEL 8976. Master's Thesis Defense (0). (P/F grade only.)

EEL 8985r. Dissertation Defense (0). (P/F grade only.) May be repeated to a maximum of three (3) times.

Department of ENGLISH

COLLEGE OF ARTS AND SCIENCES

Chair: Ralph M. Berry; **Eppes Professor:** Butler; **Kellogg W. Hunt Professor:** Yancey; **Fred L. Standley Professor:** Fenstermaker; **George Matthew Edgar Professor:** Taylor; **William Hudson Rogers Professor:** McElrath; **Sarah Herndon Professor:** Gontarski; **Bertram H. Davis Professor:** Boehrer; **Janet Burroway Professor:** Winegardner; **Lawton Professor:** Kirby; **Professors:** Berry, Bickley, Burke, Crook, Daileader, Fowler, Johnson, O'Rourke, Roberts, Rowe, Suarez, Treharne; **Associate Professors:** Coldiron, Cooper, Faulk, Fleckenstein, Gardner, Kimbrell, Laughlin, McGregory, Montgomery, Moore, Picart, Saladin, E. Stuckey-French, Vann, Vitkus, Walker, Warren; **Assistant Professors:** Baggott, Belieu, Edwards, Epstein, Goodman, Kennedy, Neal, Rai, Shinn, N. Stuckey-French, Ward; **Professors Emeriti:** Burroway, Davis, Harper, Lhamon, Ortiz-Taylor, Pugh, Standley

The Department of English offers work leading to the master of arts (MA), master of fine arts (MFA), and doctor of philosophy (PhD) degrees. Reflecting the transformation of 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 and one Robert O. Lawton Distinguished Professor, are accomplished teachers and scholars. Over twenty faculty members have won University-wide teaching awards and three are named University Distinguished Teaching Professors. In addition to prize-winning original fiction and poetry, writing faculty 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, MFA, and PhD programs emphasize literature, creative writing, or rhetoric and composition, but the department offers course work, MFA, 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 a certificate program in publishing and editing and 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 or rhetoric and composition concentrations; 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 *The Southeast Review*, are published in the department, and several scholarly journals are edited by faculty, including *Frank Norris Studies*, *The Journal of Beckett Studies*, and *The Journal of Early Modern Cultural 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 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 Programs in English

Admission to the program is determined by a departmental committee and normally requires: 1) an undergraduate major in English, or its equivalent, ordinarily with an 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 or rhetoric and composition. To ensure that students have

ready assistance in shaping a program designed to meet their needs and in planning a course of study which will meet the requirements of their particular emphasis, all students are expected to consult their advisers every term. The Director of Graduate Studies in English will serve as adviser to all first-term master's candidates or until another adviser is chosen.

To complete the master of arts or master of fine arts in English, students must satisfy the following requirements:

1. Earn thirty-three (33) credit hours for the master of arts or forty-five (45) credit hours for the master of fine arts 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
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 rhetoric and composition must satisfactorily complete and defend a thesis.
 - c. Students in the master of fine arts degree program must satisfactorily complete and defend a creative thesis.

At least twenty-seven (27) semester hours for the master of arts or at least thirty-three (33) for the master of fine arts 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 and composition track only can also count LAE 5946 toward the degree.

A student entering the program from another master's program may be permitted to transfer up to six (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, Folklore, or Cultural Studies

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
5. ENG 5xxx (Issues in Literary and Cultural Studies)
6. 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 reading list compiled by the student and his/her exam committee; 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 Rhetoric and Composition

Master's students who choose to emphasize rhetoric and composition will complete thirty-three (33) semester hours of course work, to include:

1. At least twelve (12) hours of course work in rhetoric and composition, from the following: ENC 5700, 5720; ENG 5028; LAE 5370, 5946; and ENG 5933 or ENG 6939 when the topic is rhetoric and composition;
2. Six (6) hours of thesis credit; and
3. Fifteen (15) additional hours of course work.

Master of Fine Arts in English with an Emphasis in Creative Writing

Students who wish to obtain the Master of Fine Arts in Creative Writing must complete forty-five (45) semester hours of course work, to include:

1. Twenty-one to twenty-four (21-24) semester hours of work in writing, of which:
 - a. Twelve to fifteen (12-15) semester hours will be taken in any combination of the following courses, provided at least two of the courses are taken: Fiction Workshop, Poetry Workshop, Drama Workshop, Article and Essay Workshop (the four workshops in writing may be repeated for credit), or Writing Seminar;
 - b. Nine to twelve (9-12) semester hours will be devoted to writing a creative thesis
2. Twenty-one to twenty-four (21-24) semester hours in literature and related courses, including Issues in Literary and Cultural Studies.

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 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 student's 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 5xxx (Issues in Literary and Cultural Studies) 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 5028, ENG 5049r, 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
 - d. A literature course whose chief organizing principle is race, class, gender, sexual orientation, or ethnicity
5. 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 student's 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) women's 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 in Publishing and Editing

The English department offers a certificate program in publishing and editing for graduate students interested in developing credentials and career experience in these fields. To qualify for the certificate, students must complete:

1. At least three (3) semester hours from the following:

ENC 5216	Introduction to Editing and Publishing (3)
ENG 5933	Topics in English (Topics in/Theories of Publishing) (1-3)
ENG 6939	Seminar in English (Seminar in Publishing) (3)
HUM 6939	Seminar Topics (Seminar in Publishing) (3)

2. At least nine (9) semester hours from the following:

ENC 5216 Topics in Editing (Introduction to Editing and Publishing) (3)

ENC 5217 Topics in Editing (3-6)

ENC 5945 Internship in Editing (1-6)

ENG 5906 Directed Individual Study (Editing Practicum) (1-3)

ENG 5998 Tutorial in English (Editing Practicum) (1-3)

For further details, contact the Director of Graduate Studies in English.

Certificate Program in Critical Theory

An interdisciplinary graduate program in critical theory is administered by the 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. Introduction to Editing and Publishing (3). This course serves as an introduction to book and magazine editing and publishing.

ENC 5217r. Topics in Editing (3-6). (S/U grade only.) This course offers instruction in the practical aspects of editing such as line editing, copy editing, and design. May be repeated to a maximum of six (6) semester hours.

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 (1-6). (S/U grade only.) This course offers practical experience in editing and professional writing. May be repeated to a maximum of six (6) 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 5835r. Topics in Publishing (3-6). This course offers instruction in the specific phases of the history and methods of publishing. May be repeated to a maximum of six (6) 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 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 5235r. Studies in Post-Colonial Literature in English (3). Various approaches to the study of English-language literature from "Third World" countries that were former British colonies in Africa, Asia, and the Caribbean. May be repeated to a maximum of twelve (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 women's 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). (P/F grade only.)

ENG 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

ENG 8976r. Master's Thesis Defense (0). (P/F grade only.)

ENG 8985r. Dissertation Defense (0). (P/F grade only.)

ENGLISH COMPOSITION:
see English

ENGLISH EDUCATION:
see Middle and Secondary Education

ENGLISH LITERATURE:
see English

ENGLISH FOR NON-NATIVE SPEAKERS:
see Middle and Secondary Education

ENVIRONMENTAL ENGINEERING:
see Civil and Environmental Engineering

**ENVIRONMENTAL PLANNING AND NATURAL
RESOURCE MANAGEMENT:**
see Urban and Regional Planning

EUROPEAN HISTORY:
see Classics; History

EVOLUTIONARY BIOLOGY:
see Biological Science

EXERCISE PHYSIOLOGY:
see Nutrition, Food, and Exercise Sciences

EXPERIMENTAL ANALYSIS OF BEHAVIOR:
see Psychology

EXPERIMENTAL PSYCHOLOGY:
see Psychology

Department of FAMILY AND CHILD SCIENCES

COLLEGE OF HUMAN SCIENCES

Chair: Kay Pasley; **Professors:** Darling, Krantz, R. Mullis, Ralston; **Associate Professors:** Cornille, A. Mullis, Readdick, Rehm; **Assistant Professors:** Bojczyk, Curenton, McWey; **Associate in Family and Child Science:** Mills; **Professors Emeriti:** Dales, Greenwood, Hansen-Gandy, Hendrickson, Hicks, Pestle, Rapp, Ridley-Bell, Zongker

Master's degree programs are offered in the Department of Family and Child Sciences with an emphasis in child and 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 Department of Family and Child Sciences 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 are 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 family life education, child education, child welfare services, child advocacy, and 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, 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. 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 and research interests for the doctoral program. 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 Doctoral Program in Marriage and Family Therapy also will need an affirmative recommendation by the faculty review committee. Doctoral students are admitted for fall only.

Master's Programs in the Department of Family and Child Sciences

Major in Child Development and Family Relations

Required Core Courses (ten [10] semester hours):

CHD 5266	Advanced Child Development (3)
CHD 5617	Professional Development in FCS (1)
FAD 5263	Advanced Family Studies (3)
CHD 6261	Theories of Child Development (3)

OR

FAD 6436	Theories of Family Science (3)
----------	--------------------------------

Required Research Courses (ten to thirteen [10-13] semester hours):

CHD 5915	Research Methods (3)
CHD/FAD 8966	Masters Comprehensive Examination (0)
EDF 5400	Basic Descriptive and Inferential Statistics Applications(4)
CHD/FAD 5970	Special Project (3)

OR

CHD/FAD 5971	Thesis (6)
--------------	------------

Required Electives (seven to thirteen [7-13] semester hours):

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 a minimum of 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 Core Courses (nineteen to twenty [19-20] semester hours):

FAD 5481 College Teaching in Family Sciences (2-3)
 FAD 5617 Professional Issues in FCS (1)
 CHD/FAD 5942 Supervised Teaching (3)
 CHD 6261 Theories of Child Development (3)
 FAD 6436 Theories of Family Science (3)
 HOE 6938 Proseminar in Home Economics (1-2)
 FAD 5256 Parent and Child Relations (3)

OR

FAD 5261 Families in Crisis (3)

Required Research and Statistics Courses (thirty-seven [37] semester hours):

FAD/CHD 5912r Supervised Research (1-3)
 FAD 5934r FCS Seminar: [Secondary Data Analysis] (3)
 FAD 6917 Research Methods in FCS(3)
 CHD/FAD 6980r Dissertation (1-24)
 CHD/FAD 8964 Preliminary Doctoral Exam (0)
 CHD/FAD 8985r Dissertation Defense Examination (0)
 EDF 5401 General Linear Model Applications(4)

OR

STA 5207 Applied Regression Method (4)

Required Data Analytic Electives (five to six [5-6] semester hours)

Elective Courses within FCS (twelve to thirteen [12-13] semester hours)

Other Electives (ten [10] semester hours)

PhD in Marriage and Family Therapy

Required Courses (twenty-three to twenty-five [23-25] semester hours):

FAD 5261 Families in Crisis (3)
 FAD 5481 College Teaching in Family Sciences (2-3)
 FAD 5617 Professional Issues in FCS (1)
 CHD/FAD 5942 Supervised College Teaching (3)
 CHD 6261 Theories of Child Development (3)
 FAD 6436 Theories of Family Science (3)
 FAD 6930r Special Topics in MFT (3-9)
 HOE 6938 Proseminar in Human Sciences (1)

Required Research and Statistics Courses (thirty-seven [37] semester hours):

FAD 6607 Family Services Research I (3)
 FAD 6608 Family Services Research II (3)
 FAD 6917 Advanced Research Methods (3)
 FAD 6980r Dissertation (1-24)
 FAD 8964 Preliminary Doctoral Exam (0)
 FAD 8985r Dissertation Defense Examination (0)
 EDF 5401 General Linear Model (4)

OR

STA 5207 Applied Regression Method (4)

Clinical Practice Requirements (thirty-three [33] semester hours):

FAD 5944r Internship in MFT (1-12)
 FAD 6606 Supervision in MFT (3)
 FAD 6940r Practicum in MFT (1-5)

Data Analytic Electives (five to six [5-6] semester hours)

All students must pass a preliminary examination prior to admission to candidacy and before they can register for dissertation hours. A minimum of thirty (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. Admission to these programs has been suspended until fall 2008.

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 at least thirty (30) semester hours and the course-work type requires at least 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, 5935r or 5971r, 8966, CHD 5915. 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.

Marriage and Family Therapy

The Marriage and Family Therapy program offers major sequence courses related to marriage and family therapy that lead toward the doctor of philosophy degree. Unique to this program is its integration in the

Family and Child Sciences department and curriculum. Students must meet departmental admission requirements, as well as have an affirmative recommendation of a faculty review committee.

Definition of Prefixes

CHD—Child Development
FAD—Family Development
HEE—Home Economics Education
HOE—Home Economics: General

Graduate Courses

Child Development

CHD 5266. Advanced Child Development (3). Survey of the contemporary child development research literature.

CHD 5617. Professional Development in Family and Child Sciences (1). Prerequisite: Graduate standing. This course is designed to introduce graduate students in Family and Child Sciences to professional development topics in the field of family and child sciences.

CHD 5618. Policy Development and Analysis in Child and Family Sciences (3). Prerequisites: Graduate standing; background in child and family studies; permission of instructor. This course surveys local and national public policy issues affecting individuals and families.

CHD 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of nine (9) semester hours.

CHD 5915. Methods of Research (3). Study of research design, with emphasis on the development of the prospectus for a thesis or dissertation.

CHD 5919. Grant Writing in Family and Child Sciences (3). Prerequisites: Graduate standing; background in family and child development; permission of instructor. This course is designed to identify funding sources at local, state, and federal levels. Students review techniques and develop proposals to be submitted to child and family funding sources.

CHD 5940r. Practicum in Child Development: Varied Ages (infancy, preschool, school-age) (3–9). Prerequisites: Background knowledge in child development or early childhood education 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 6264. Assessment Techniques for Children and Families (3). Prerequisites: Background in child and family studies; permission of instructor. This course examines current child and family assessment techniques. Psychometric characteristics of measurements are reviewed.

CHD 6930r. Seminar in Child Development: Topics Vary and/or Ages Vary (prenatal, infancy, preschool, school-age through adolescence) (3–9). Prerequisites: Graduate courses in child development, psychology, counseling, or family. 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 5256. Parent and Child Relations (3). Prerequisites: Graduate standing; background in child and family studies. This course examines current research in parent-child relationships across the life span.

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 5263. Advanced Family Studies (3). Prerequisites: Graduate standing; background in child and family studies. This course surveys contemporary research in family studies.

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 5619. Professional Issues in Family and Child Sciences (3). Prerequisite: Graduate standing. This course introduces students to two major concepts: professional identity and ethical issues in family and child studies.

FAD 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. Internship Family/Child (1–12). Prerequisite: Family relations/child development majors only; Corequisite: Graduate standing. Supervised practical field experiences in various professional settings related to family/child development including human services, agencies, hospitals, educational facilities, and government. May be repeated to a maximum of twelve (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 6436. Theories of Family Sciences (3). Prerequisites: Graduate standing; background in child and family studies; permission of instructor. This course is a review of current theories in family studies.

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 6606. Supervision in Marriage and Family Therapy (3). Prerequisite: Passage of Clinical Comprehensive Examination in Marriage and Family Therapy. This course teaches the fundamentals of marital and family therapy supervision through didactic presentation, supervised experience of actual supervisory practice, and reflective interaction. This course meets the specifications required for the Approved Supervisor Designation of the American Association of Marriage and Family Therapy.

FAD 6607. Family Therapy and Services Research Methods I (3). Prerequisite: Admission to the Interdivisional Program in Marriage and Family Therapy. This course introduces the student to the application of the philosophy, rationale, and methodologies of program evaluation to the fields of family therapy and family services. It draws on examples of specific evaluations related to methodologies that will be discussed in the course.

FAD 6608. Family Therapy and Services Research Methods II (3). Prerequisite: FAD 6607. This course draws on program evaluation and family therapy clinical training research to prepare the student to use research methodologies in the fields of family therapy and family services. It will use examples of specific evaluations and practice exercises from clinical training in the field of marital and family therapy. Students are expected to apply the skills taught in an active evaluation of MFT training practices.

FAD 6917. Methods in Family and Child Sciences (3). Prerequisites: At least one graduate-level research course, doctoral students only, statistics, permission of the instructor. Overview of research methods currently in use in studying individuals, families, and children.

FAD 6930r. Special Topics: Marital and Family Therapy; Topics Vary (3–9). 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 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 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.

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). (P/F grade only.)

HEE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

HEE 8976r. Master's Thesis Defense (0). (P/F grade only.)

HEE 8985r. Dissertation Defense (0). (P/F grade only.)

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). (P/F grade only.)

CHD 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

CHD 8976r. Master's Thesis Defense (0). (P/F grade only.)

CHD 8985r. Dissertation Defense Examination (0). (P/F grade only.)

FAD 5912r. Supervised Research (1–3). (S/U grade only.) A maximum of three (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). (P/F grade only.)
FAD 8966r.	Master's Comprehensive Examination (0). (P/F grade only.)
FAD 8976r.	Master's Thesis Defense (0). (P/F grade only.)
FAD 8985r.	Dissertation Defense Examination (0). (P/F grade only.)

FAMILY DEVELOPMENT:
see Family and Child Sciences

FILM:
see Communication; English; Latin American and Caribbean Studies; Modern Languages and Linguistics; Motion Picture, Television, and Recording Arts

FINANCE:
see also Multinational Business Operations

Department of FINANCE

COLLEGE OF BUSINESS

Chair: William A. Christiansen; **Professors:** Ang, Celec, Clark, Coats, Humphrey, Lee, Osteryoung, Peterson; **Associate Professors:** Benesh, Christiansen; **Assistant Professors:** Autore, Cheng, Doran, Haslem, Hutton, Inci, Jiang, Knill; **Assistant in Finances:** Smith; **Fannie Wilson Smith Eminent Scholar in Banking:** Humphrey; **Bank of America Eminent Scholar in Finance:** Ang; **Patty Hill Smith Eminent Scholar in Finance:** Lee; **Wachovia Professor of Finance:** Peterson; **Jim Moran Professor of Entrepreneurship:** Osteryoung; **Robert C. Earnest Professor of Finance:** Coats; **Bank of America Professor of Finance:** Christiansen

The Department of Finance faculty has diverse interests spanning all areas of finance including financial management, investments, financial institutions and markets, multinational financial management, financial modeling, and quantitative methods. The faculty possesses a commitment to excellence in teaching, research, and service activities.

The fundamental responsibilities of the finance faculty are to preserve existing knowledge, to create new knowledge, and to transmit knowledge to others. To transmit knowledge to the graduate student a variety of teaching techniques and methodologies are employed, including case studies, lectures, simulations, computer modeling, oral and written presentations, discussions groups, study groups, co-research projects, and independent study and research.

The faculty members consider their research activity important for two reasons. First, the constant search for, and testing of, new knowledge is a basic foundation of economic progress. Second, as the financial and economic environment changes, current knowledge may become obsolete. The finance faculty members are involved in the development of new financial and management techniques so that their students are prepared to meet the challenges they will face during their careers. The faculty's research appears in many scholarly publications.

The finance faculty is dedicated to the advancement of the finance profession not only through its teaching and research activities but also through its involvement with outside government, business, academic, and professional organizations.

Master's Degree

The college offers the master in business administration (MBA) degree. As the ever-changing economic, political, and social trends place expanding needs and expectations on businesses, government agencies, and not-for-profit organizations, the demand for a wider range of financial and management skills has never been greater. The effective functioning of our economic and financial system is a concern to all members of our society. The MBA focuses on assembling, acquiring, and developing knowledge and skills that are related to the effective workings of our economic and financial system.

Doctoral Degree

A doctor of philosophy (PhD) in business administration is offered by the college. The Department of Finance offers a concentration in finance. The finance doctoral program facilitates the development of a solid foundation in the use of analytical and research tools applicable to finance problems and a thorough understanding of modern finance theory and applications. The primary objective of the curriculum is to develop the knowledge and skills necessary for prospective teachers and researchers in finance. The employment goal of most finance doctoral students is to teach and conduct research at the college or university level. However, many employment opportunities for PhD graduates exist in government and business.

The prospective finance doctoral student must meet college-wide admission standards and be recommended by the finance faculty. Students plan their program in consultation with the finance doctoral adviser and an advisory committee. The student must complete the courses in the finance primary area, a support area, and the analytical and research tools area. The support area can be chosen from another area of business or from a non-business discipline such as economics, mathematics, or statistics. Extensive student-faculty interaction is stressed throughout the program and culminates in the completion and defense of a dissertation under the guidance of the finance faculty.

Definition of Prefixes

ECP—Economic Problems and Policy

FIN—Finance

GEB—General Business

MAN—Management

Graduate Courses

Master's

Note: The 5000 level courses are reserved exclusively for graduate students. Courses which may be repeated for credit are designated by "r" immediately following the course number.

ECP 5706. Economic Analysis for Management (3). An examination of managerial concepts underlying business activity as related to the production of management and the process of decision making.

FIN 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 toward 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). (P/F grade only.)

FIN 8976. Master's Thesis Defense (0). (P/F grade only.)

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). (P/F grade only.)

FIN 8985r. Dissertation Defense Examination (0). (P/F grade only.)

GEB 6904r. Readings For Examination (1-12). (S/U grade only.) Prerequisite: All 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: Victor Mesev; **Professors:** Elsner, Kodras, O'Sullivan, Warf; **Associate Professors:** Baker, Klooster, Leib, Stallins, Steinberg; **Assistant Professors:** Horner, Jordan, Yang; **Affiliate and Adjunct Faculty:** Fradel, Miller

The Department of Geography at Florida State University offers graduate degree programs at the master's and doctoral levels designed to equip students with the technical skills and intellectual creativity required in a changing labor market, 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 members address both the theoretical and applied policy arenas in their research, teaching, and service functions.

The department's foundation in geo-spatial sciences is built upon expertise in geographic information systems (GIS), remote sensing, and spatial analysis. Faculty active in this area specialize in theoretical developments in GIScience, quantitative methods and spatial modeling, as well as their applications to human and environmental issues, such as changes in urban morphology and transport infrastructure. The College of Social Sciences hosts a GIS laboratory with microcomputers running GIS, remote sensing, and statistical software.

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.

Requirements

Applicants must hold a degree in geography or a related field from an accredited college or university, a baccalaureate degree in the case of students entering the master's program and a master's degree in the case of applicants to the doctoral program. Individuals holding degrees in fields other than geography are welcome to apply but may need to make up deficiencies, as judged by the graduate director and major professor. Minimum requirements for admission are a 3.0 GPA or a combined verbal/quantitative GRE score of 1000. Students whose native language is not English 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. 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. 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.

Master's Program

Non-Thesis Option

The non-thesis option master's program is designed as a flexible course of study allowing the student, in consultation with the major professor, to develop a specialized program tailored to the student's interests and career goals. Students entering this program generally seek the master's as a terminal degree. The department offers both the master of science (MS) and master of arts (MA) degrees.

The course work for the non-thesis option consists of a minimum of thirty-two (32) 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.

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 course work 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 bachelor's level may petition for exemption. Students must earn a grade of "B" or better in each of the core courses:

- GEO 5058 Survey of Geographic Thought (3)
 GEO 5118C Introduction to Geographic Research (3)
 GEO 5165C Quantitative Geography (3)

In addition, each student selects at least five elective courses (fifteen [15] semester hours) in consultation with the graduate adviser or major professor.

With the advice of a supervisory committee, the student prepares a written thesis prospectus that identifies a substantive geographic topic and demonstrates familiarity with the literature and methods appropriate to its solution. The prospectus is developed in consultation with the major professor. When the major professor deems it ready, the student must orally defend the prospectus. Full-time students should plan to defend the prospectus by the end of the first academic year. Once the prospectus has been accepted, the student begins the research and writing process, working with the major professor on initial drafts and drawing the supervisory committee into the process over time. The final step involves an oral defense of the thesis after the complete working draft has been accepted by the major professor. The defense is open to departmental faculty and graduate students.

Applied GIS Option

The applied MS program in Geographical Information Science (GIS) is aimed at individuals who wish to cultivate a deep understanding of geospatial technologies in mapping and data analysis rather than a broad-based understanding of geography as a discipline. Students must earn thirty-two (32) semester hours, including six (6) semester hours in a capstone project. This fast-track option allows students to complete their degree in 12 months if they wish.

Required Courses. Students are required to take three core courses (fourteen [14] semester hours) designed to provide a solid foundation for investigating geographic issues relating to social and environmental problems. Students must earn a grade of "B" or better in each of the core courses:

- GEO 5165 Quantitative Geography (3)
 GEO 5934 Seminar in Current Topics: Remote Sensing(3) and accompanying laboratory (1)
 GIS 5100 Advanced Geographic Information Systems (3)
 GIS 5101 Geographic Information Systems (3) and accompanying laboratory (1)

Elective Courses. In addition to the required courses, each student selects at least four elective courses (twelve [12] semester hours) in consultation with the Applied GIS Program Coordinator:

- GEO 5934 Seminar in Current Topics: Advanced Quantitative Geography (3)
 GEO 5934 Seminar in Current Topics: Bayesian Thinking (3)
 GIS 5111 Spatial Modeling in Geographic Information Science (3)

- GIS 5400 Geographic Information Systems Applications for Social Sciences (3)
 ISM 5206 Database Development and Management (3)
 URP 5279 Urban and Regional Information Systems Practicum (3)
 GIS 5038C Advanced Remote Systems (3)
 GIS 5131 Geographic Visualization Methods (3)
 GIS 5305 Geographic Information Systems for Environmental Analysis and Modeling (3)

The **Capstone Project** (six [6] semester hours) is designed in consultation with a faculty member and demonstrates the student's skills by either developing an individual project or engaging in a work-related internship. It is offered only during summer terms.

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 dissertation prospectus that demonstrates the potential to conduct original research making a significant contribution to knowledge. Once the prospectus is deemed acceptable to the major professor and the supervisory committee, the student begins the research and writing process. At some point during one's doctoral study, a student must register for a total of twenty-four (24) semester hours taken in a period of twelve (12) consecutive months. The final step involves an oral defense of the dissertation, which is open to public viewing.

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 \$12,000 and \$15,000. Support in following years is contingent on satisfactory performance academically and in assistantship duties, for a maximum of two years for master's students and four years for doctoral students. Department assistantships usually include a waiver of tuition.

Department assistantships require that recipients perform instructional or research duties within the department. Students holding research assistantships are required to provide between thirteen (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—Geography: Regional Areas
 GEO—Geography: Systematic
 GIS—Geographic Information Systems

Graduate Courses

Note: Many courses are taught as seminars in current topics (see GEO 5934r below). Call the department for current offerings.

- GEA 5195r. **Advanced Area Studies (3).** In-depth study of a particular world region, including Europe, Latin America, and East Asia.
 GEO 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 5115. **Environmental Field Methods (3).** Design, implementation and presentation of a field-based project employing sampling, GIS, GPS, and exploratory statistical methods.

GEO 5118C. Introduction to Geographic Research (3). Survey of research design and methods, strengths and weaknesses of alternative strategies, reliability and validity measures, and methods of writing.

GEO 5165C. Quantitative Geography (3). 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 5305. Biogeography (3). This course examines the spatial distributions of flora and fauna, vegetation dynamics, ecosystem change, and issues related to biodiversity, invasive species, wildfire policy, and debates over wilderness.

GEO 5345. Disaster Preparedness and Hazards Mitigation (3). This course deals with natural hazards such as hurricanes and earthquakes and human-made hazards such as nuclear power and air pollution. The student will acquire perspectives, tools, and information to choose rationally among public policy alternatives regarding responses to environmental hazards.

GEO 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 5414. Geospatial Data and Analysis (3). This course addresses topics in geographic theory, beginning with the history and social context of the field, including the debates over regions, urbanization, economy, population, development, and the role of markets and nation states. Each theoretical position is tied to method, both in terms of standard practices and critical challenges.

GEO 5417. Race and Place (3). This course integrates various concepts and topics concerned with the spatial construction and effects of race and ethnicity, including identity, segregation, political and cultural landscapes, and environmental justice.

GEO 5425. Cultural Geography (3). The study of the processes by which various cultural features have diffused throughout the world. Emphasis is on the contemporary cultural landscape, particularly that of the United States.

GEO 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 modernization theory, and current topics in ethnic conflict and the global economy.

GEO 5705. Communications Geography (3). This course is an examination of the geopolitics of telecommunications, the space-shrinking impact of technologies, and their economic and social effects, including cyberspace.

GEO 5908r. Directed Individual Study (1-6). (S/U grade only.) May be repeated to a maximum of nine (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 (1-3). A variety of subjects is offered on an occasional basis under the heading of "Special Topics." Recent offerings include the Geography of Hunger, Advanced GIS, and Globalization.

GEO 5947r. Supervised Teaching (1-3). (S/U grade only.) A maximum of three (3) hours may apply to the master's degree. May be repeated to a maximum of three (3) semester hours.

GEO 5971r. Thesis (1-9). (S/U grade only.) A minimum of six (6) semester hours is required.

GEO 6980r. Dissertation (1-12).

GEO 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

GEO 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

GEO 8976r. Master's Thesis Defense (0). (P/F grade only.)

GEO 8985r. Dissertation Defense (0). (P/F grade only.)

GIS 5038C. Advanced Remote Sensing (3). Prerequisite: GEO 5934. This course focuses on quantitative approaches to the analysis of remotely sensed data. Digital multitemporal, multispectral, multisensor remote sensing images acquired by a range of sensors, and the application of digital remote sensing for urban and environmental analysis will be discussed. Quantitative methods in digital remote sensing image enhancement, radiometric normalization, rectification, georeferencing, and classification.

GIS 5100. Advanced Geographic Information Systems (3). Prerequisite: GEO 5146. Students apply GIS to a problem from their own research or one supplied by a local government agency. Topics include environmental modeling, GIS spatial analysis and visualization.

GIS 5101. Geographic Information Processing and Systems (3). 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.

GIS 5106. Advanced Geographic Information Science (3). Prerequisite: GEO 5159. Subjects covered include any combination of the following: spatial cognition; geographical representation; spatial pattern analysis; linear modeling; spatial autocorrelation; spatial modeling and simulation; spatial interpolation; digital terrain modeling and visualization; spatial data mining and reasoning; data quality and uncertainty; mobile GIS; Internet GIS.

GIS 5111. Spatial Modeling in Geographic Information Science (3). This course introduces advanced spatial modeling theories and associated techniques in GIS. Topics addressed include spatial optimization, GIS for transportation, spatial decision support systems, and other advanced quantitative techniques. Emphasis is on fostering a broad understanding of spatial modeling and connecting spatial modeling techniques to students' substantive domains.

GIS 5131. Geographic Visualization (3). This course examines the design and implementation of effective visualization of geographic data, phenomena, patterns, and processes. The theoretical basis is formed by cartography, visual perception and communication models. Emphasis is placed on the creation, analysis, and display of statistical surfaces. Students explore trends in cartography visualization methods including interactive and animated mapping techniques.

GIS 5305. Geographical Information Systems for Environmental Analysis and Modeling (3). Technical topics covered include space-time variability in environmental data, environmental data acquisition and integration, interpolating environmental data, error and uncertainty, environmental decision support systems, environmental modeling techniques, and the integration of geospatial technologies with environmental modeling systems. Applications include hydrological modeling, terrain modeling and landform analysis, landscape pattern analysis, land suitability analysis, soil erosion modeling, and wildfire modeling.

GIS 5400. Geographic Information Systems Applications in Social Sciences (3). Practical examples from the fields of health, economic geography and real estate, housing, transportation, criminology, and others are used to illustrate how spatial analysis techniques are used to address problems in a GIS environment. Special consideration is given to the data needs of such operations, the implementation of methods in a GIS environment, and understanding the spatial assumptions and issues that underpin analyses.

GEOGRAPHY: REGIONAL

see *Geography*; *General Bulletin*: Latin American and Caribbean Studies

Department of GEOLOGICAL SCIENCES

COLLEGE OF ARTS AND SCIENCES

Chair: A. Leroy Odom; **Professors:** Odom, Tull, Wise; **Associate Professors:** Arnold, Donoghue, Kish, Parker, Salters, Wang; **Assistant Professors:** Fagherazzi, Georgen, Schmeckle, Streepey; **Professors Emeriti:** Cowart, DeVore, Loper, Osmond

The Department of Geological Sciences offers post-baccalaureate 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 home, was completed in 1953 and renovated in 1998. The PhD program was initiated in the early 1960s, and the faculty has since grown to its present size. Faculty interests encompass many specialties, including geophysics, geochemistry, micropaleontology, marine geology, hydrogeology, sedimentology and coastal processes, geomorphology, 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 Geophysical Fluid Dynamics Institute, the School of Computational Science, 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.

The department's main geochemistry laboratories are at the National High Magnetic Field Laboratory. Instrumentation available for research includes inductively coupled plasma mass spectrometers, thermal ionization mass spectrometers, Delta Plus light isotope mass spectrometer, alpha and gamma spectrometers, automated X-ray diffraction equipment, electron spin resonance spectrometer, atomic absorption and UV-VIS spectrometers, gravimeter and magnetometer, recirculating sediment transport flume, automated settling tube, electrozone particle counter, computerized image capture and analysis

system, and facilities for hydrologic studies of surface and ground waters (saturated and unsaturated). A number of research microscopes, image analysis system, GIS laboratory, microcomputers, and field vehicles, as well as geochemical sample and thin-section preparation equipment, also support the program.

In addition to holding faculty positions at major universities around the world, graduates of this department have outstanding records in both government and industry. In Florida, large numbers of the department's graduates are employed by the Water Management Districts of the state, the Department of Environmental Protection, the Florida Geological Survey, the United States Geological Survey, phosphate and clay mining companies, and numerous geologic and engineering consultant companies. Outside the state, a large number of graduates hold scientific and executive positions with major petroleum and mining companies. Other geology graduates hold civil service positions with the United States Nuclear Regulatory Commission, National Aeronautics and Space Administration, United States Geological Survey, Soil Conservation Districts, Army Corps of Engineers, and state geological surveys.

Fellowships, as well as teaching and research assistantships, are available to highly qualified students. This financial support is awarded on a competitive basis. In addition, numerous geologically related part-time jobs, with both governmental and private agencies, are available in Tallahassee. Graduate students who require some type of financial assistance can normally find it.

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*. The following requirements for the MS and PhD degrees are spelled out in greater detail in the *Department of Geological Sciences Graduate Handbook*.

Admission Requirements

Admission to the graduate program requires a score of 1000 (verbal and quantitative) on the aptitude test of the Graduate Record Examinations (GRE) and a score of at least 400 on each portion, or an undergraduate grade point average (GPA) of 3.0. International students whose native languages are other than English are also required to achieve a score of 550 or better on the Educational Testing Service's Test of English as a Foreign Language (TOEFL), and to take (and report scores to this department) the Test for Spoken English (TSE).

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 Prefixes

ESC—Earth Science

GLY—Geology

Graduate Courses

ESC 5211r. Current Topics in Earth Science (3). An overview of recent advances in earth sciences for secondary school earth science teachers. May not be taken for major credit in earth science. May be repeated to a maximum of six (6) semester hours.

ESC 5215r. Current Topics in Earth Science (3). An overview of recent advances in earth sciences, for secondary school earth science teachers. May be repeated to a maximum of six (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 5265. Nuclear Geology (3). Prerequisite: GLY 4240 or equivalent. Nucleosynthesis and systematics of the nuclides, radioactive and radiogenic isotopes as natural tracers, theory and application of isotopic fractionation.

GLY 5267. Stable Isotopic Tracers in the Environment (3). An introduction to the basic principles of stable isotope geochemistry. The application of stable isotopes to geochemical, hydrological and ecological problems.

GLY 5297r. Advanced Topics in Geochemistry (1-3). Special topics, on demand, in low temperature geochemistry. May be repeated to a maximum of six (6) semester hours.

GLY 5395r. Advanced Topics in Petrology (1-3). Special topics, on demand, in igneous, metamorphic, and sedimentary petrology. May be repeated to a maximum of six (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 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.

Program in GEOPHYSICAL FLUID DYNAMICS

COLLEGE OF ARTS AND SCIENCES

Program Director: Phillip Cunningham;

Coordinating Committee: Cunningham (Meteorology); Georgen (Geological Sciences); Wang (Mathematics); Jin (Meteorology); St. Laurent (Oceanography); **Professors:** Chen (Engineering); Hussaini, Navon, Stern, Wang (Mathematics); T.N. Krishnamurti, Zou (Meteorology); Clarke, Dewar, Huettel, R. Krishnamurti, Nof, Speer, Weatherly (Oceanography); **Associate Professors:** Chan-Hilton (Engineering); Hu (Geological Sciences); Blumsack (Mathematics); Cai, Clayson, Ruscher (Meteorology); **Assistant Professors:** Bourassa, Cunningham, Georgen, Reasor (Meteorology), St. Laurent (Oceanography); **Research Scientist:** Cain; **Associates Emeritus:** Loper (Geological Sciences); Howard (Mathematics); Barcion, O'Brien, Pfeffer (Meteorology)

Geophysical fluid dynamics is an interdisciplinary field of study whose primary goal is an improvement in our basic understanding of fluid flows which occur naturally, including such diverse topics as climate and paleoclimate, biogeochemical processes, hydrology and Karst dynamics, air-sea interaction, wild fire dynamics, double diffusive processes, and hurricane dynamics. The approach to this understanding is through mathematical, numerical, and experimental modeling and observational programs. A geophysical fluid dynamicist must have a firm grasp of the fundamental principles of classical physics, knowledge of the techniques of applied mathematics, and an interest in the natural sciences. It follows that the course of study leading to a degree in geophysical fluid dynamics is a rewarding one in which the student gains an overview of the geophysical sciences not available from study in a single discipline.

The interdepartmental graduate program of study leads to the doctor of philosophy (PhD) degree; there is no master's degree offered. The program is administered by the Geophysical Fluid Dynamics Institute, and has its own separate degree requirements. It differs from the regular departmental offerings in the earth sciences mainly by its interdisciplinary approach and emphasis on the fundamentals of mathematics, physics, and fluid dynamics, with less emphasis on descriptive material from any one discipline.

A major factor in the success of this PhD program is the strong support provided by the Departments of Geological Sciences, Mathematics, Meteorology, Oceanography, Physics, and Statistics, and the Schools of Engineering and Computational Science (SCS). In particular, these departments offer a wide range of courses from which the student in geophysical fluid dynamics constructs an individualized curriculum. Faculty members of various departments who have an active research interest in geophysical fluid dynamics form the heart of the program by serving as advisers and instructors for the students in the program.

Facilities are situated in the **Geophysical Fluid Dynamics Institute**, whose primary function is to support and foster those theoretical, experimental, numerical, and observational studies of natural environmental fluid flows which transcend the traditional departmental disciplines.

These facilities include a large modern laboratory for hydrodynamics experiments, a colloquium room and reading room (furnished with books and periodicals in fluid dynamics, classical physics, applied mathematics, geophysical sciences, and astrophysical sciences), a photographic and illustrations laboratory, a large modern machine shop, a precision instrument-makers laboratory, and faculty and student offices. Institute facilities also include several precision rotating turntables, a 6-meter water channel, convection tanks, temperature controlling systems, general and digital photographic systems, multi-channel data acquisition systems, laser facilities, various machine tools, and other electronic equipment. The institute houses a facility for measuring ocean turbulence as well.

The main computing facilities at GFDI consist of a Quad Dual Core Opteron Server, 6 Dual Xeon workstations running a mix of Linux and Windows XP, two Dual AMD Opteron servers, a terabyte of high performance disk space, and four Dual AMD MP servers. This is complemented by several other modern workstations, laser-jet printers, scanners, and a robust network infrastructure. The GFDI computing environment includes access to an Inter-departmental cluster.

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 5595r. Advanced Topics in Sedimentation and Stratigraphy (1-3). Special topics, on demand, in fluvial, shoreline, and oceanic sedimentation and in stratigraphic principles or regional stratigraphy. May be repeated to a maximum of six (6) semester hours.

GLY 5624C. Introduction to Micropaleontology (3). Taxonomy, ecology, and paleoenvironmental aspects of selected microfossils with emphasis on foraminifera.

GLY 5625C. Advanced Micropaleontology (3). Biostratigraphic and evolutionary studies with emphasis on smaller foraminifera.

GLY 5695r. Advanced Topics in Paleontology (1-3). Special topics, on demand, in paleontology. May be repeated to a maximum of six (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 5736. Marine Geology (3). Shoreline, shelf, and deep ocean processes; marine sediment types and sedimentary environments; plate tectonics; origin of the ocean; paleoceanography; marine mineral resources. Includes research methods cruise for familiarization with marine geologic sampling and sensing devices. Credit may not be received for both GLY 5736 and OCG 5050.

GLY 5757C. Fundamentals of Remote Sensing, Air Photo Interpretation and GIS for the Earth Sciences (4). Prerequisites: GLY 3400C; 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 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). (P/F grade only.)

GLY 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

GLY 8975r. Master's Thesis Defense (0). (P/F grade only.)

GLY 8985r. Dissertation Defense (0). (P/F grade only.)

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 Florida State University.

Completion

The program of study for students is individually tailored to meet their particular needs and interests. The formal requirements are few and include completion of course work from several different departments with a grade of "B" or better, participation in a seminar at least two times, and mastery of modern computer techniques, particularly numerical analysis. The remainder of the curriculum is chosen by the advisory committee in consultation with the student based upon the student's program of study. There is no foreign language requirement. The remainder of the curriculum is normally chosen from among courses offered by several departments. Typically students, in consultation with their advisory committee, will choose from among the following topics.

Engineering

Viscous fluid flows, turbulent flows, introduction to computational mechanics, water resources and environmental engineering, hydraulics, hydrology, and ground water.

Geological Sciences

Geophysics, geomechanics, geophysical methods, seismology, modeling of groundwater flow, hydrology.

Mathematics

Numerical analysis, vector and tensor analysis, ordinary and partial differential equations, matrix algebra, integral transforms and asymptotics, perturbation theory, hydrodynamic stability, wave propagation theory.

Meteorology

Atmospheric thermodynamics, atmospheric dynamics, large-scale atmospheric circulations, dynamical weather prediction, air/sea interaction, satellite oceanography.

Oceanography

Ocean waves, stability of geophysical fluid flows, ocean dynamics and circulation, coastal ocean dynamics, main ocean thermocline, turbulence.

Physics

Principles of thermodynamics, mechanics, electricity and magnetism, theoretical dynamics, electrodynamics, statistical mechanics.

Statistics

Computational methods in statistics, statistical procedures for the natural sciences, statistical inference, probability, multivariate analysis, stochastic processes, applied time series analysis.

Note: Description of the following courses can be found under the departmental listings.

Engineering

CEG 5125, 5415, 5515, 5635; EGM 5456, 5810, 6845; ENV 5045.

Geological Sciences

GLY 4451, 5425, 5455, 5465, 5556, 5573, 5575, 5825, 5826, 5827, 5868r.

Mathematics

MAA 4402; MAD 5708, 5738, 5739, 6408r; MAP 5207, 5217, 5345, 5346, 5423, 5431, 5441, 5512, 5513, 6434r, 6437r, 6939r.

Meteorology

MET 5311, 5312, 5340r, 5471, 5541r, 6308r, 6561r.

Oceanography

OCP 5056, 5253, 5271, 5285, 5551, 5939r.

Physics

PHY 4222, 4513, 5246, 5346, 5347, 5524.

Statistics

STA 5106, 5206, 5326, 5327, 5440, 5447, 5807r.

Definition of Prefix

GFD—Geophysical Fluid Dynamics

Graduate Courses

GFD 6905r. **Directed Individual Study (3)**. (S/U grade only.) May be repeated to a maximum of nine (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)**. (P/F grade only.)

GFD 8985r. **Dissertation Defense (0)**. (P/F grade only.)

GERMAN LANGUAGE, LITERATURE IN TRANSLATION:
see Modern Languages and Linguistics

GERONTOLOGY:
see Aging and Public Policy, The Pepper Institute on; Urban and Regional Planning

GREEK LANGUAGE, LITERATURE: WRITINGS:
see Classics

GROWTH MANAGEMENT AND COMPREHENSIVE PLANNING:
see Urban and Regional Planning

GUIDANCE AND COUNSELING:
see Educational Psychology and Learning Systems

HEALTH AND AGING, PLANNING AND POLICY IN:
see Urban and Regional Planning

HEALTH EDUCATION:
see Middle and Secondary Education

HEALTH-RELATED PROGRAMS

Numerous health-related programs at Florida State University address issues of prevention, treatment, rehabilitation, health sciences, and policy formulation. As part of an effort to develop and promote a coordinated plan for these programs, the following section lists and describes, by program/department, areas of study, services, and (in some instances) certification opportunities for graduate students. For more detailed information and requirements, see individual program listings in this *Graduate Bulletin*.

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@mailers.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.

The Department of Communication Disorders administers the Interdepartmental Certificate Program in Developmental Disabilities. The purpose of this program is to provide upper-division undergraduate students from a variety of disciplines with knowledge regarding etiology, assessment, treatment, and policy issues related to individuals with developmental disabilities and their families. Students seeking certification must complete nine (9) semester hours of course work and three (3) semester hours of practicum from an approved list of courses and practica. More than forty courses are available in the following disciplines: Art Education; Communication Disorders; Family and Child Services; Middle and Secondary Education; Music Education/Therapy; Nursing; Nutrition, Food and Exercise Sciences; Physical Education; Psychology; Social Work; and Special Education. For information, contact lgessner@fsu.edu or (850) 644-9141.

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 Social/Health Sciences

The College of Social Sciences offers the Master of Public Health (MPH) degree.

MPH degree graduates will be trained principally as health administrators and health policy analysts. They will have a rich background in epidemiology, health economics, health behavior, health administration, health policy and policy analysis, and statistical and qualitative analytic skills. Careers are likely to include government agency or legislative staff positions, policy and consulting firms, think tanks, advocacy organizations and lobbying firms, international organizations focused on health and population issues, academic or media positions.

For additional information, please refer to the "Interdisciplinary Program in Public Health" 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*.

College of Nursing

The College of Nursing offers a master of science degree in nursing. Graduates are educated for a variety of advanced practice nursing roles, with an emphasis on nursing education, case management, and nurse practitioner. Students interact closely with faculty in one-on-one mentoring, seminars, and online classes. Clinical opportunities are designed to develop each student's ability to make decisions, to practice creatively and imaginatively, and to cope with change in a climate of scholarship, discovery, and professional example.

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. 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 and exercise physiology. Master's students are trained

as health practitioners 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.

College of Social Work

Based on values of service, social and economic justice, dignity and worth of the person, importance of human relationships, and integrity and competence in practice, the purposes of social work are to: 1) enhance human well-being and alleviate poverty, oppression, and other forms of social injustice; 2) enhance the social functioning and interactions of individuals, families, groups, organizations, and communities by involving them in accomplishing goals, developing resources, and preventing and alleviating distress; 3) formulate and implement social policies, services, and programs that meet basic human needs and support the development of human capacities; 4) pursue policies, services and resources through advocacy and social or political actions that promote social and economic justice; 5) develop and use evidence-based research, knowledge, and skills that advance social work practices; and 6) develop and apply practice in the context of diverse cultures.

The purpose of social work education is to prepare competent and effective social work professionals, to develop social work knowledge, and to provide leadership in the development of service delivery systems. Social work education is grounded in the profession's history, purposes, and philosophy and is based on a body of knowledge, values, and skills. Social work education enables students to integrate the knowledge, values, and skills of the social work profession for competent, evidence-based practice.

The College of Social Work offers curricula leading to a master'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 and joint degree programs.

Sport Management, Recreation Management, and Physical Education

The Department of Sport Management, Recreation Management and Physical Education offers master's specialist'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: TBA

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 5935* 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 T. Jumonville; **Associate Chair (Graduate Studies):** Green; **Associate Chair (Undergraduate Studies):** Strait; **Professors:** Anderson, Betten, Gellately, Howard, J. Jones, M. Jones, Jumonville, Oldson, Richardson, Singh, Wynot; **Associate Professors:** Friedman, Garretson, Grant, Gray, Green, Hadden, McMahon, Sinke, Stoltzfus, Strait; **Assistant Professors:** Childs, Creswell, Davis, Herrera, Koschnik; **Professors Emeriti:** Bartlett, Bryant, Conner, Howard, Keuchel, Moore, Richardson, Rogers, Rubanowice, 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, and Latin American history. In addition to the traditional MA degree that requires mastery of a major and a minor field and completion of a thesis, the department provides an MA in historical administration and public history which prepares students for careers such as archivists and museum curators and lays the groundwork for historically oriented careers in governmental agencies and the private sector.

The department also participates in interdisciplinary programs in American studies, women's studies, humanities, international affairs, Asian studies, and social sciences. Some of these interdisciplinary programs lead to an MA degree and others to the PhD. For information concerning these programs, refer to their appropriate entry in this *Graduate Bulletin*. At the doctoral level in history, students may earn the degree by demonstrating mastery of a major field and three minor fields and completing a dissertation.

Graduate students have access to the many collections at the Strozier Library. Because Strozier is a United States government repository, it houses abundant governmental documents available for graduate student use. In addition, The Florida State Archives, located within walking distance of the campus, includes private collections as well as state government documents. The Florida Supreme Court library and the Florida A&M University Black Archives are 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 Distinguished Teaching Professors, the highest distinction the University faculty bestows for teaching. Scholarly contributions by faculty are numerous and currently include over 100 books, the development of the second largest collection of Napoleonic source materials in the country, and several major research projects, including the prestigious multivolume *Black Abolitionist Papers Project*, and the *Guadalajara Censuses Project*.

The **Institute on Napoleon and the French Revolution**, as part of the history department in the College of Arts and Sciences, was founded in 1990 by the Florida Board of Regents. As an interdepartmental and intercollegiate 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 75 doctoral and master's students have graduated from the program. The institute organizes international meetings, publishes appropriate volumes, holds symposia, and is one of the founding and active members of the Consortium on Revolutionary Europe.

The **Institute on World War II and the Human Experience** was created in 1997 to collect, preserve, and convey to classes the experiences of the wartime generation. Housing thousands of letters, diaries, photos, and interviews, Florida State University's 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 of 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. Eighteen (18) semester hours of undergraduate work in history are 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 (online at <http://admissions.fsu.edu>), a departmental application must be submitted, including three letters of recommendation and a statement of goals. All materials must be received by February 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-four (34) semester hours of graduate work, six (6) of which must be in HIS 5971r, Thesis. As part of the thirty-four (34) hours, the student must take two seminars or colloquia (one of which must be in the major field) HIS 6934, Approaches to History, and HIS 6059, Historical Methods. For details regarding major and minor field requirements, consult the department's graduate handbook.

In addition, the student must fulfill the language requirement (reading knowledge of one foreign language), and write an acceptable thesis.

Master's Program in Historical Administration and Public History

Director: Jennifer Koslow, Assistant Professor of History

The program in historical administration and public history (HAPH) prepares students to enter historically oriented careers in fields such as archives, historic site identification and preservation, museum administration, information and records management, and careers in the private sector and governmental agencies.

Program Overview

Students must complete a minimum of forty-five (45) semester hours of graduate work, including eighteen (18) 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 6059, Historical Methods, fulfill the language requirement, and write a thesis or professional paper related to the internship.

Professional Training Courses for All HAPH Students

To fulfill the professional training requirement, students must take the 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)

OR

HIS 5935	Museum Studies and Practice (4)
HIS 5932	Graduate Tutorial in History (1-2)
HIS 5935	Special Topics In History: Introduction to Public History (4)

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: Ten (10) semester hours in HAPH courses: HIS 5082, 5083, 5084 or 5935

PhD: Ten (10) semester hours in HAPH courses: (HIS 5082, 5083, 5084/5935) 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 1865; United States since 1865; or a topical United States major such as immigration history, African-American history, intellectual history, or southern history. For European majors, students may select from 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 and HIS 6934; Teaching History at the College Level (HIS 6941) is strongly recommended. Doctoral students must also take five seminars or colloquia. In addition, the demonstration of reading proficiency in two foreign languages or of reading proficiency in one foreign language and competency in another approved research skill is required.

Definition of Prefixes

AFH—African History

AMH—American History

ASH—Asian History

CLA—Classical and Ancient Studies

EUH—European History

HIS—General History and Historiography

LAH—Latin American History

WOH—World History

Graduate Courses

African History

AFH 5308. Northern African History (4). This course will concentrate on the modern history of North Africa including: Maghrib, Morocco, Algeria, Tunisia, Libya, Egypt, Sudan, Ethiopia and Somalia. It is intended to provide an understanding of the background and problems of North African states today.

American History

AMH 5116. Colonial American History to 1763 (4). A study and comparison of the founding and development of the English colonies in North America.

AMH 5139. Revolutionary America, 1760-1788 (4). Examines the political, social and economic history of British America from the end of the Seven Years War to the ratification of the United States Constitution. Special emphasis will be given to the origins, course, and aftermath of the colonial rebellion that became the American Revolution, and which led to the founding of the United States. The course considers the fundamental causes of the Revolution and the many ways, some intended by the Founders but many not, in which the former colonies were transformed by the experience.

AMH 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, post-industrialism, 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 mainstream American life after the Civil War. The unique problems of adjusting to defeat, the revolution in the labor system, and troubled race relations are considered.

AMH 5424. History of Florida From 1821 to the Present (4). A history of Florida from the period of its acquisition from Spain in 1821 until the present. The various "periods" in the state's past are discussed and major attention is given to the period 1920 to the present, the period of greatest growth.

AMH 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 5635. Florida Environmental History (4). Applies the methods and approaches of environmental history to Florida, considering the changing relationships between human beings and the natural world through time. The field explores how nature has helped to shape culture as well as how humans have modified the natural world and transformed the land.

AMH 5636. North American Environmental History (4). This course introduces the changing relationships between human beings and the natural world in America through time.

AMH 5645. Humor and the American Mind (4). This course discusses American intellectual and cultural history from the 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 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 Classics.

CLA 5438r. Studies in Greek History (3). Study of selected topics in Greek history in the archaic, classical, or Hellenistic periods. May be repeated to a maximum of six (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 Socialism's impact on German institutions and racial consequences.

EUH 5508. England in the Middle Ages (4). History of England from Anglo-Saxon settlements to the establishment of the Tudor dynasty. Covers all significant aspects of life in medieval England, but emphasis is on the growth of English common law, the constitution, and administrative structures.

EUH 5509. Modern Britain Since c. 1870 (4). This course investigates the social, cultural, and political history of Great Britain from approximately 1870 to the present. Major themes include the evolution of class structures; new cultural trends; changing political culture, ideologies and institutions; and the relationship between these perspectives. Historiographical themes appropriate to the course will also be explored.

EUH 5518. Stuart England (4). 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 world's 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 comparative 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 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. Introduction to Archives (4). The nature of archives; various types of records; arranging and processing archives; restoring and protecting records; archival institutions, policies, and procedures.

HIS 5083. Introduction to Historic Preservation (4). The identification, preservation, and maintenance of historic sites; the historic preservation movement.

HIS 5084. Museum Management (4). A study of the organizational dynamics and multifold management concerns of history museums.

HIS 5085r. Internship in Historical Management (4-8). (S/U grade only.) A professional apprenticeship, usually with the Florida Division of Archives, History, and Records Management, designed to give students a practical introduction to the work of the historian in various fields. May be repeated to a maximum of eight (8) semester hours.

HIS 5089r. Historical Administration and Public History Program Capstone Research Project (1-6). (S/U grade only.) MA in historical administration and public history candidates only. A minimum of six (6) semester hours is required. May be repeated to a maximum of six (6) semester hours.

HIS 6087. Museum Studies and Practice (4). This course comprises an overview of the history and development of museums, issues and theories in museum studies, and an introduction to the practical concerns of the professional museum field.

Others

HIS 5077. Oral History (4). Exposes students to the use of oral history as a research technique and provides experience in conducting professionally acceptable oral history interviews.

HIS 5909r. Directed Individual Study (1-4). (S/U grade only.) May be repeated to a maximum of twelve (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 6469. Historiography and Science (4). This course introduces graduate students to the range of scholarship within the history of science and reveals the full sweep of the study of science and society by examining studies of various scientific disciplines and time periods.

HIS 6500. History of Life Sciences (4). This course considers the development of life sciences from 1750 to the present. It introduces students to critical problems related to biology and society through the study of primary and secondary sources.

HIS 6909r. Directed Individual Study (1–4). (S/U grade only.) May be repeated to a maximum of twelve (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). (P/F grade only.) May be taken twice.

HIS 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

HIS 8976r. Master's Thesis Defense (0). (P/F grade only.)

HIS 8985r. Dissertation Defense (0). (P/F grade only.)

WOH 5238. Disease, Race, and Environment (4). This course examines the close relationship between disease, race, and environment in the development of civilizations of the world.

WOH 5246. World War II (4). Deals with World War II on a global basis, avoiding the common Eurocentric approach. Analyzes the character of the Pacific theater as well as that of the European War, presenting the student with insights into and contrasts between the various belligerents.

HISTORY AND PHILOSOPHY OF EDUCATION:
see Educational Leadership and Policy Studies

HOUSING AND COMMUNITY DEVELOPMENT:
see Urban and Regional Planning

HUMAN NUTRITION:
see Nutrition, Food, and Exercise Sciences

HOUSING AND HOME DESIGN:
see Textiles and Consumer Sciences

Program in HISTORY AND PHILOSOPHY OF SCIENCE

COLLEGE OF ARTS AND SCIENCES

Director: Michael Ruse

Florida State University offers a program in the History and Philosophy of Science, leading to an undergraduate minor or a Master's degree. The focus of the program is on the biological sciences, although we welcome applications from potential students interested in other areas of science. We take very seriously the importance of working on topics of relevance to the society in which we live, and we are strongly committed to an interdisciplinary approach, with involved faculty drawn broadly from across the university, especially the humanities and the natural sciences.

As a major university, we are able to offer opportunities for study and research in topics of particular pertinence to our region, such as racial issues, conservation and problems of pollution, and clashes between

science and religion. We also have major strengths in other areas, including logic and formal methods, social philosophy, intellectual and cultural history, history of the South, African American history, ancient science and mathematics, and evolution and ecology.

FSU has attractive competitive scholarships, and there are opportunities for research and teaching assistantships that include remission of tuition. Strong library facilities exist, and we are building further on these. We are committed to helping our students when they complete their degrees, either to further graduate work or to entering the work force. The Master's degree with its multidisciplinary breadth is appropriate for those interesting in pursuing a PhD in philosophy, history, religion or biology. It is also suitable for those undergraduates who would like to combine it with one of the traditional disciplines in our combined Bachelor's-Master's program. In all cases, we will aim to tailor individual course programs to suit students' needs.

The Program hosts an annual conference or workshop, supported by the Werkmeister Fund. Those interested in learning more about the degree, or in enrolling, should consult our Web site and contact the office of the Director.

Degree Requirements

On entering the degree program, all students will be assigned an individualized committee of pertinent faculty to oversee their personal program. All students enrolled in the History and Philosophy of Science Program are required to take a minimum of twelve (12) courses.

All students must engage in a significant piece of independent research. There are two options, and students will be expected to choose one after consultation with their personal committee. One option is to write an MA thesis (approximately 75 pages). A successfully completed thesis will count the equivalent of four (4) courses. The second option is to write a research paper, with the intent to publish. There is no word limit (upper or lower), for this will depend on the topic and other factors. (For instance, philosophy papers are generally shorter than history papers.) A paper deemed satisfactory by the student's committee will count the equivalent of two (2) courses.

The remaining courses will be chosen in consultation with the personal committee, and can be taken in either history or philosophy (or some combination thereof), or in one or more of the other associated departments (religion, classics, biology, psychology, etc.).

All courses must be passed with a grade of at least "B–", and students are expected to maintain a "B" average.

Required History Courses

HIS 6469 Historiography and Science

HIS 6500 History of Life Sciences

Required Philosophy Courses

PHI 5934r Topics in Philosophy

PHI 6935r Seminar in Philosophical Topics

Other Possible Courses

CHM 5910 Science, Technology, and Society

EXP 5406 Conditioning and Learning

WST 5904r Gender, Authority, and the Politics of Representation in Science and Art

WST 5934r Women and Science

Elective Courses

PHI 6406r Philosophy of Science

HIS 5932r Science and American Political Culture

AMH 5337 US Intellectual History II: 1880 to the Present

PHI 5135 Modern Logic I

GEO 5305 Biogeography

Note: For a complete listing of courses applicable to the degree, please contact Michael Ruse, Program Director, at (850) 644-4128.

Department of Interdisciplinary HUMANITIES

COLLEGE OF ARTS AND SCIENCES

Chair and Graduate Adviser: David Johnson, Associate Professor of English; **Associate Chair and Graduate Adviser:** Maricarmen Martinez; **Graduate Advisers:** Cloonan (Modern Languages and Linguistics); **Coordinator of Undergraduate Advising:** Stoddard; **Graduate Faculty:** Brewer (Music), Briggs (Classics/Humanities), Dupuigrenet (Humanities), Efimov (Modern Languages and Linguistics), Fleming (Modern Languages and Linguistics), Grindal (Anthropology), Kelsay (Religion), Laughlin (English), Levenson (Religion), Picart (English), Saladin (English), Sandon (Religion), Seaton (Music), Slaveva-Griffin (Classics), Standley (English), Weingarden (Art History)

The Master of Arts program 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, is designed to offer qualified students a broad program combining offerings from the participating departments of Anthropology, Art History, Classics, Communication, Dance, English, History, Modern Languages and Linguistics, Music, Philosophy, Religion, and the School of Theatre. These programs provide an enlarged perspective assisting in an understanding of the significance of the specialized disciplines in the humanities area.

All graduate students are required to make an appointment with the chair of the department to approve course work for the following term.

Please refer to the department Web site at <http://dih.fsu.edu> for additional information pertaining to graduate programs in humanities. For information related to American and Florida Studies or Latin American and Caribbean Studies (LACS), please confer with Dr. Maricarmen Martinez or Susan Diaz by calling the department at (850) 644-9121.

Requirements for the Interdisciplinary Master's Program in Humanities

Please review all college-wide requirements summarized in the "College of Arts and Sciences" chapter in this *Graduate Bulletin*.

On the master's level, the humanities department offers a thirty-three (33) semester hour non-thesis program with the following requirements.

Admission

The following criteria must be met to be admitted to the master's program: 1) an undergraduate major in one of the humanities area departments; 2) a Graduate Record Examination (GRE) score of 1000 and a minimum grade point average of 3.0 or higher in all work attempted as an upper-division student working for a baccalaureate degree; and 3) three (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 (ARH); and at least **one** must focus on analogous aspects of music (MUS). When appropriate HUM 6939r seminars are not offered, one of the following courses may be selected:

Literature

ENG 5049r Studies in Critical Theory
ENG 5138r Studies in Film
LIT 5017r Studies in Fiction
LIT 5038r Studies in Poetry
LIT 5047r Studies in Drama

Art History

Any graduate course in art history that is open to non-majors.

Music

MUH 5380 Music in the Humanities (or any graduate level music course that is open to non-majors)

Other Requirements

In addition, certification of competency in reading a foreign or classical language 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*.

Admission

Typically, incoming PhD students have a master's degree in one of the participating humanities-area departments before admission to the doctoral program. Students with MA degrees in interdisciplinary humanities or fine arts may be admitted to the doctoral program by permission of the Chair with the understanding that they will complete, in one departmental area acceptable to the humanities program, the equivalent number of courses required for an MA degree in that department. Students with non-humanities oriented MA degrees are required to complete an MA degree in humanities or in one of the participating 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 are admitted to the program on the recommendation of the Admissions Committee of the Program in the Humanities and the chair of the department of the student's concentration. A minimum cumulative score of 1000 or higher is required on the Graduate Record Examinations (GRE) and a minimum grade point average of 3.0 or higher on all work previously attempted.

Requirements

In consultation with the Chair, doctoral students choose one of two sequences at the required 5000 level. Most students take a chronologically oriented sequence that is fulfilled by completing the HUM 5227, 5245, and 5253 sequence. Students who have already completed work that is equivalent to this sequence take one that aims at a topical and methodological approach toward intellectual history, comparative literature, and the fine arts and may be fulfilled by completing (with the approval of the Chair) a sequence of nine (9) semester hours of courses such as the following: ARH 5795, HIS 5346, MUH 5380, or PHI 6808r and other related courses.

Doctoral students are also required to select a total of three seminars designated HUM 6939r offered by the humanities program. With permission from the Chair, a student may be permitted to substitute one or more seminars in their departmental area. HIS 5346 or LIT 5066r may be substituted for one of the seminar requirements. **At least one** of these seminars or courses must focus on literary analysis, criticism, history, or appreciation (LIT); at least **one** must focus on analogous aspects of art history (ARH); and at least **one** must focus on analogous aspects of music (MUS). When appropriate HUM 6939r seminars are not offered one of the following courses may be selected:

Literature

ENG 5049r Studies in Critical Theory
ENG 5138r Studies in Film
LIT 5017r Studies in Fiction
LIT 5038r Studies in Poetry
LIT 5047r Studies in Drama

Art History

Any graduate course in art history that is open to non-majors.

Music

MUH 5380 Music in the Humanities (or any graduate level music course that is open to non-majors)

Other Requirements

In addition to the required humanities courses, a student takes approximately one-half of the course work in the department of concentration (including the work taken at the master's level) and the remainder

in a carefully selected cluster of courses offered by participating departments in a major chronological period and a cultural theme or in a major and minor chronological period. The major chronological period requires eighteen (18) semester hours of work, and the minor period or theme requires twelve (12) semester hours of work.

After finishing thirty (30) semester hours of graduate work or being awarded the master's degree, the doctoral student must be continuously enrolled at Florida State University, Tallahassee campus, for a minimum of twenty-four (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 is 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.

Definition of Prefixes

HUM—Humanities

Graduate Courses

HUM 5227. The Humanistic Tradition: Greek and Roman (3). Studies in the thought, values, and arts of Greek and Roman culture.

HUM 5245. The Humanistic Tradition: Medieval, Renaissance, and Baroque (3). Studies in the thought, values, and arts of Western culture from the early Christian era through the Renaissance and baroque periods.

HUM 5253. The Humanistic Tradition: The Modern World (3). Studies in the thought, values, and arts of modern Western culture.

HUM 5909r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (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 5938r. Interdisciplinary Topics (3). This course provides students from any discipline with an integrated interdisciplinary learning experience. The course is taught by instructors from at least two different departments and/or colleges. Topics vary. May be repeated to a maximum of eighteen (18) 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). (P/F grade only.)

HUM 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

HUM 8985r. Dissertation Defense (0). (P/F grade only.)

INDUSTRIAL/APPLIED PSYCHOLOGY: see Psychology

Department of INDUSTRIAL ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Chair: Chuck Zhang; **Professors:** Awoniyi, Braswell, Wang, Zhang; **Associate Professors:** Liang, Okoli, Owusu, Pignatiello, Simpson; **Assistant Professor:** Boginski, Park; **Adjunct Professor:** Moshir

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: Advanced Material Processing, Applied Robotics and Ergonomics, Automated Systems, Composite Manufacturing and Testing, Computer Integrated Manufacturing, Precision Manufacturing, and Quality Engineering. Each lab is equipped with state-of-the-art research and instructional equipment. For example, the manufacturing lab includes full-size and table-top robots and CNC machines, as well as software for data acquisition, simulation, and process monitoring and control.

Students have access to 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 successful completion of prerequisite work. In all matters concerning admission, decisions made by the departmental graduate committee are final. Students who

do not have a bachelor's degree in industrial engineering are required to complete the following prerequisite courses before undertaking graduate study:

EGN 3443 Statistical Topics in Industrial Engineering,
AND
MAC 2313 Calculus with Analytic Geometry III
OR
MAS 3105 Applied Linear Algebra
OR
equivalent course as determined by the graduate committee.
AND
ESI 3312C Operations Research I: Deterministic
OR
ESI 4313 Operations Research II: Nondeterministic
OR
equivalent course as determined by the graduate committee
AND
a class in FORTRAN, PASCAL, or C (required as evidence of proficiency in programming).

Admission Requirements for Traditional MSIE

- A BS in industrial engineering (or a related field) from an accredited college or university, with a GPA of at least 3.0
- Minimum scores of at least 650 on the quantitative portion and 400 verbal portion of the GRE
- A minimum score of 580 on the TOEFL (international students only)
- Three letters of recommendation, addressed to the Director of Graduate Studies, assessing the applicant's potential to do graduate work
- A statement of professional goals

Admission Requirements for MSIE with Specialization in Engineering Management

Requirements for admission to this program are identical to the MSIE admission requirements, except that applicants' BS degree can be in engineering, computer science, mathematics, physics, or a related area as determined by the Director of Graduate Studies.

Degree Requirements

Thesis Option

Each MSIE student who intends to complete a thesis is required to take a minimum of thirty (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. Students must maintain an overall GPA of 3.0 or above in order to graduate.

When filing a degree plan, students must specify one of the department's areas of concentration as their major: manufacturing systems and engineering, or quality engineering and industrial systems. If the desired area of concentration differs from the initial area assigned (based on the student's graduate application), a petition to the Director of Graduate Studies must be submitted requesting the change.

There are three sets of courses under the traditional MSIE program: core course, specialization industrial engineering courses and electives:

Core Courses. Every student choosing the thesis option must take the following courses and receive a grade of "B" or better in each: ESI 5408, Applied Optimization; ESI 5247, Engineering Experiments; ESI 5525, Modeling and Analysis of Manufacturing and Industrial Systems; and EIN 5936, Graduate Seminar.

Specialization Courses. These courses are used in defining minimum requirements for each specialization area. Each student is required to take at least three from those courses listed in his or her chosen area of specialization. Substitutions may be made with the approval of the student's advisory committee and the Director of Graduate Studies. Please refer to the departmental Web site at <http://www.ie.eng.fsu.edu>.

Electives. Elective courses provide program variation for students. An industrial engineering graduate course may be selected as an elective

course. With the consent of the advisory committee, the student may take courses from other engineering departments, or other academic schools or colleges of the two universities.

Non-Thesis Option

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. Each student must obtain an overall GPA of 3.0 or above in order to graduate. The following are the core courses for the non-thesis option:

EIN 5622 Computer-aided Manufacturing (3)
EIN 5936 Graduate Seminar (0)
ESI 5247 Engineering Experiments (3)
ESI 5408 Applied Optimization (3)
ESI 5417 Engineering Data Analysis (3)
ESI 5451 Project Analysis and Design (3)
ESI 5525 Modeling and Analysis of Manufacturing and Industrial Systems (3)
[Choose one]
ESI 5223 Statistical Process Control (3)
OR
ESI 5228 Introduction to ISO 9000 (3)

Specialization in Engineering Management

Students are expected to complete thirty-three (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.

Doctor of Philosophy

The PhD in industrial engineering is designed for students and professionals who wish to pursue academic careers or to achieve advanced standing in the field. The general requirement is a minimum of seventy-two (72) semester hours of work beyond the baccalaureate degree, excluding any credits earned for a master's degree thesis, or a minimum 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. Students must maintain a minimum GPA of 3.4 at all times while enrolled in the program.

Admissions

Note: The following standards also pertain to students who wish to pursue a PhD but have not yet obtained their master's degree.

Applicants must meet the following minimum requirements:

1. Have a baccalaureate or master's degree in industrial engineering (or related field) from an accredited college or university, with a grade point average (GPA) of at least 3.0 on a 4.0 scale, and at least 3.4 GPA on master's degree work
2. Have a minimum score of 700 on the Quantitative portion and 450 on the Verbal portion of the GRE
3. Have a minimum score of 580 on the TOEFL (international students only)
4. Three letters of recommendation, addressed to the Director of Graduate Studies, assessing the applicant's potential to do graduate work
5. A statement of professional goals

Core Courses for PhD Students

All PhD students are required to take the following courses as soon as possible after their admission to the PhD program. These courses provide students with a common, solid background in mathematics, statistics, and industrial engineering.

During the first calendar year of the PhD program, students must select a single course from each of the Mathematics and Computational course groups, and must earn a grade of "B" or higher. Students who do not satisfy this requirement may be dismissed from the program.

Mathematics Course Group

- MAA 5306** Advanced Calculus I (3)
MAD 5345 Elementary Partial Differential Equations I (3)
STA 5325 Mathematical Statistics (3)

Computational Course Group

- MAD 5403** foundations of Computational Methods I (3)
MAP 5395 Finite Element Methods (3)
STA 5106 Computational Statistics I (3)

The following courses are required if the student did not take them to fulfill requirements for the master's degree: ESI 5247, Engineering Experiments; ESI 5408/ESI 5412, Applied Optimization; and ESI 5525, Modeling and Analysis of Manufacturing and Industrial Systems.

Core courses cannot be taken on a pass/fail (S/U) basis.

Preliminary Examination

Following completion of a major portion of the 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**—Engineering: General
EIN—Industrial Engineering
EMA—Materials Engineering
ESI—Industrial/Systems Engineering

Graduate Courses

- EIN 5182. Engineering Management (3).** Prerequisite: EIN 5353. Course in modeling existing and future organizations, with emphasis on organizations for the 21st century. Special consideration is given to flat matrix models.
- EIN 5353. Engineering Economic Analysis (3).** Prerequisites: EGN 3443; MAP 3305. This course includes feasibility science, mathematics and engineering focused on the engineering economic analysis of design and system alternatives for high technology operations.
- EIN 5392. Manufacturing Processes and Systems (3).** Prerequisite: EGN 4000. Material forming, material removal and material joining processes. Shop floor layout topics. Material flow topics. Information system topics. System integration topics. Manufacturing system evaluation topics. Case studies and design exercises.
- EIN 5398. Manufacturing Materials Processing (3).** Prerequisite: EIN 5392. Review of basic concepts and fundamental results of materials science. Fundamentals of casting processes and applications. Nontraditional methods in materials processing. Microscale material processing, with applications to microelectronics and similar structures. Industrial byproduct processing. Automation issues. Case studies and design exercises.
- EIN 5459. Concurrent Engineering (3).** Prerequisite: Graduate or senior standing with 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 5524. System Modeling and Simulation (3). Prerequisites: CGS 3460; EGN 3443; ESI 3443. Discrete event, continuous, and process simulation. Combined discrete/continuous simulation. Manufacturing systems modeling. Event graphs. Simulation languages and systems. Experimentation with models. Introduction to simulation-specific statistical problems. Model validation and verification issues. Design exercises.

EIN 5622. Computer-Aided Manufacturing (3). Prerequisite: EIN 3390C. CAD/CAM. Numerical Control (NC) and Computer Numerical Control (CNC). Programmable automation. Computer-aided process planning.

EIN 5623. Computer-Aided Process Planning (3). Prerequisites: CGS 3408; EGN 2123; EIN 3390C, 4312. Course covers the role of process planning and computer-aided process planning (CAPP), development of CAPP, configuration of CAPP systems, input approaches of CAPP systems, process routing planning, machining operations design, variant CAPP systems, generative CAPP systems and artificial intelligence in CAPP.

EIN 5905r. Directed Individual Study (1-3). (S/U grade only.) Prerequisite: Instructor permission. May be repeated to a maximum of six (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 6976r. Master's Thesis Defense (0). (P/F grade only.)

EMA 5182. Composite Materials Engineering (3). Prerequisite: Permission of instructor. Course provides basic understanding of composite materials. Topics include introduction to composite materials, properties and forms of constituent materials, consideration of composite behavior and failure modes, characterization of material performance and testing, introduction to available manufacturing techniques, laboratory demonstrations, and case studies.

ESI 5223. Statistical Process Control (3). Prerequisite: ESI 4234. Advanced methods of statistical process control for univariate and multivariate processes, methods for change point detection and estimation, control chart performance comparisons, process capability studies.

ESI 5228. Introduction to ISO 9000 (3). Prerequisite: Permission of instructor. Introduction to the ISO 9000 quality system standards. Quality auditing. Audit report writing. Documenting the requirements. Case studies and demonstrations.

ESI 5243. Engineering Data Analysis (3). Prerequisite: EGN 3443 or equivalent. Analysis of experimental and observational data from engineering systems. Course focuses on empirical model building using observational data for characterization, estimation, inference and prediction.

ESI 5247. Engineering Experiments (3). Prerequisites: EGN 3443; ESI 5417. Course provides an introduction to designing experiments and analyzing the results. It is intended for engineers and scientists who perform experiments or serve as advisers to experimentation in industrial settings. Students must have an understanding of basic statistical concepts. A statistical approach to designing and analyzing experiments is provided as a means to efficiently study and comprehend the underlying process being evaluated. Insight is gained that leads to improved performance and quality.

ESI 5328. Environmentally Conscious Design and Manufacturing (3). Prerequisite: Graduate standing. This course offers a review of basic concepts and fundamentals of environmentally conscious design and manufacturing. The topics include ecology and environment; review of environmental laws and regulations pertaining to design and manufacturing; the global picture of environmental concerns; integration of environmentally conscious design and manufacturing within a company; and life-cycle analysis for product and process design.

ESI 5408. Applied Optimization (3). Prerequisite: ESI 3312C. Optimization topics relevant to industrial operations and systems. Emphasis on basic modeling assumptions and procedure implementation. Topics shall include linear programming, nonlinear programming, discrete optimization and large-scale optimization software. Design exercises.

ESI 5451. Project Analysis and Design (3). Prerequisites: EGN 3613; ESI 3312C. Project analysis and evaluation, utilizing networks and graph theory, advanced engineering economy, simulation procedures and other evaluation software. Project implementation topics, including resource shortfalls and expediting. Case studies and design exercises.

ESI 5458. Optimization on Networks (3). Prerequisite: ESI 3312C. Review of basic combinatorics. Basic concepts of graph theory. Matching and covering, and applications. Traversability and path problems on networks and applications. Tree problems. Network flows and applications. Eulerian paths, Hamiltonian paths, and applications. Location problems on networks. Design exercises.

ESI 5524. Advanced Simulation Applications (3). Prerequisite: ESI 4523 or EIN 5524. Application of simulation to complex systems, including material handling systems, real time scheduling, high speed/high volume production, modern manufacturing techniques, health-care delivery and logistics. Concurrent use of simulation and other analysis techniques. Use of experimental design, output analysis and validation techniques. Case studies.

ESI 5525. Modeling and Analysis of Manufacturing and Industrial Systems (3). Prerequisites: EIN 4333, ESI 3312C, 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.

Doctoral

EIN 6629. Tolerancing and Metrology for Precision Manufacturing (3). Prerequisites: EIN 5398, 5408. Theory and applications of tolerancing techniques in precision machining. Topics include tolerance representation, tolerance stack-up, tolerance analysis and synthesis, statistical tolerancing, coordinate measuring machines, form error evaluation algorithms, and advanced topics in form error assessment. Case studies and design exercises.

EIN 6980r. Dissertation (3-24). (S/U grade only.) Prerequisite: Doctoral candidate standing. Mandatory class for all PhD seeking students. May be repeated to a maximum of forty-eight (48) semester hours.

EIN 8964. Preliminary Doctoral Examination (0). (P/F grade only.) Prerequisite: Doctoral candidate standing.

EIN 8985r. **Dissertation Defense (0).** (P/F grade only.) Prerequisite: Doctoral candidate standing.

INDUSTRIAL/APPLIED PSYCHOLOGY: see Psychology

INFORMATION STUDIES

COLLEGE OF INFORMATION

Professors: Bertot, Dennis, Dresang, C. Jorgensen, McClure, Riccardi, Wiegand; **Associate Professors:** G. Burnett, K. Burnett, Everhart, Gathegi, **Assistant Professors:** Burke, Currim, Douglas, Kazmer, Kim, Latham, Lustria, Marty, Mon, Newell, Randeree, Stulila, Tripp; **Other Personnel:** Barrager, Brooks, Chavez-Hernandez, Doffek, Frouillard, Franklin, P. Jorgensen, Koontz, Kotrla, Marks, Miner; **Professors Emeriti:** Aaron, Blazek, Conaway, DePew, Hart, Hunt, Jahoda, Logan, Robbins, Summers, Trezza

The College of Information 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 college also offers a specialist degree and a doctor of philosophy degree.

For complete details of degree requirements, plus a description of the college, its facilities, opportunities, and available financial assistance, refer to the "College of Information" chapter of this *Graduate Bulletin*.

Definition of Prefix

LIS—Library and Information Studies

Note: Master's degree students may take, with the approval of their academic adviser, a 4000-level course which will count toward the degree.

Graduate Courses

LIS 5105. Communities of Practice (3). Prerequisite: LIS 5603. Examines historical, contemporary, and emerging communication patterns and knowledge generation and use in the research, scholarly, and professional communities. Studies the development of communities of practice, their literature structures and communication networks, and information behaviors.

LIS 5203. Assessing Information Needs (3). Provides students with an overview of the user's perspective in the analysis of information needs and preferences. Provides the fundamentals to a broad approach, emphasizing a unifying structure, to understand human information seeking behaviors.

LIS 5241. International and Comparative Information Service (3). Explores the political economy of information, including those factors which encourage or discourage free exchange of information within and among inhabitants of countries worldwide. The unit of analysis is an individual country in comparison with others chosen from along the spectrum of development. Attention is given to the legal, economic, and infrastructural conditions from a culturally sensitive point of view. Practical preparation for work abroad is provided.

LIS 5260. Information Science (3). A basic introduction to the interdisciplinary field of information science, including its goals, methods, and applications in information providing/information managing environments. 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). Prerequisite: LIS 5703. Theory of information retrieval for text, images, and sound. Discussion of various retrieval, query, and knowledge representation methods beyond Boolean models, including vector, probabilistic, and associative network models. Elaboration of concepts of retrieval performance efficiency and effectiveness beyond precision and recall. Relevant issues of user interfaces and hypertext are explored.

LIS 5270. Evaluating Networked Information Services and Systems (3). This course introduces the importance and applications of evaluating networked information services and systems. It examines a number of research methods and specific data collection techniques to assess their quality and impact, emphasizing assessment in public and governmental sectors. Descriptions of the development of performance measures are also discussed.

LIS 5271. Research in Information Studies (3). Examines the principles and methods of systems analysis and research in the context of library and information studies. Considers problem identification and definition and techniques of data collection and analysis, including statistical analysis. The course also discusses typical problems studied.

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 concepts of human cognition required for information processing.

LIS 5313. Design and Production of Media Resources (3). Techniques for designing, producing, and evaluating media sources which meet specific instructional needs.

LIS 5316. Information Graphics (3). The theory and use of graphical presentation of sound and text in both paper and electronically displayed information. Includes critical evaluation, semiotics and cognitive theory.

LIS 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). Examines the theory, concepts and techniques for designing, producing, and evaluating network multimedia resources to meet specific information needs. Students engage in collaborative design projects applying theoretical constructs from communication, education, engineering, graphic design, and information science to the provision of resources using emerging multimedia network technologies.

LIS 5364. Web Site Development and Administration (3). Prerequisite: LIS 5362. Issues and techniques related to the planning, production, and management of large World Wide Web sites, including information organization and design, hardware and software, and cutting-edge development tools. Special emphasis paid to information provision, and the role of Web developers as providers and managers of information resources.

LIS 5367. Advanced Web Applications (3). Prerequisite: LIS 5362. Examines theory, concepts, and techniques for designing, producing, and evaluating World Wide Web applications to meet specific information needs. Students engage in design projects applying theoretical constructs to the provision of Web-based information resources using advanced authoring techniques.

LIS 5408. Management of Information Organizations (3). Prerequisite: LIS 5411. Designed to develop a conceptual framework for integrating fundamental management concepts, principles, theories, and practices into an effective, personal management process that relates to information organizations of the 21st century.

LIS 5411. Introduction to Information Policy (3). Examines selected fundamental policy questions relating to information use, access, and dissemination. Particular attention is given to complex policy issues that involve value conflicts among information ownership rights, personal privacy rights, and public access rights to information in a societal context.

LIS 5413. Seminar in Information Policy (3). An analysis of both existing and possible public policies toward the production, dissemination, recording, and ownership of information. The economic, political, and social aspects of policy analysis will be introduced and applied to specific information policy issues.

LIS 5416. Introduction to Legal Informatics (3). This course is an introduction to the role of information technology in the creation, management, and retrieval of legal information in the legal work environment, such as the law office and the law library. It also examines the use of information technology in judicial administration and other legal contexts. It introduces the student to legal informatics as variously defined and explores the detailed structure of legal information database retrieval systems such as LEXIS and Westlaw, as well as other storage and automatic retrieval of law sources.

LIS 5417. Introduction to Legal Resources (3). Provides an introduction to legal literature and to the tools of legal research to create an understanding of how legal information is organized, structured, and accessed in various settings.

LIS 5418. Introduction to Medical Informatics (3). This survey course evaluates medical informatics from a stakeholder perspective. Beginning with a brief overview of the US health care system, the focus then shifts to understanding to what extent health information needs are met using technology for user such as providers of health care services, clinician educators, consumers, and caregivers.

LIS 5426. Planning, Evaluation and Financial Management (3). Basic skills in planning, evaluation, and financial management are developed, as well as application of these aspects to the overall management task in the information organization.

LIS 5484. Introduction to Data Networks for Information Professionals (3). An introductory course concerned with networking and telecommunications as a means of providing information services to users. From LANs to the information superhighway, it includes an introduction to voice, data, and video telecommunications concepts, technical requirements, and application issues, in addition to techniques and management of such systems.

LIS 5487. Information Systems Management (3). An introduction to the role of information systems in organizations and how 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 with a focus on managing a network.

LIS 5511. Management of Information Collections (3). This course covers the principles of collection development and intelligence gathering, including selection, acquisition, distribution, circulation, preservation, and deselection of information resources in academic, public, and special library environments.

LIS 5512. School Collection Development and Management (3). This course provides an understanding of the attitudes, knowledge, and skills necessary to manage human resources and provide effective leadership in a school library media program. Covers collection development and management in school libraries. Required for school media certification. It is recommended that students take this course the semester before taking the State of Florida media specialist exam.

LIS 5513. Preservation of Information Materials (3). Introduction to the problems, solutions, management, and ethics of the preservation of library, archive, media, and information center materials.

LIS 5524. Instructional Role of the Informational Specialist (3). The instructional role of the media specialist and methods of participating effectively in curricular planning, implementation, and evaluation.

LIS 5564. Information Needs of Children (3). Materials for children in relation to their needs, interests and abilities. Evaluation and use of printed and audiovisual materials.

LIS 5565. Information Needs of Young Adults (3). Study of media for young adults in relation to their characteristics, needs, interests and abilities. Evaluation and use of printed and audiovisual materials.

LIS 5566. Multicultural Literature and Information Resources for Children and Young Adults (3). Course identifies and evaluates multicultural literature and information resources for children and young adults in relation to ethnicity and culture of ethnic minorities in the United States. Students will locate, access, read, evaluate, and develop strategies to use multicultural literature and other resources to meet information needs of children and young adults.

LIS 5567. International Literature for Children and Young Adults (3). Course provides graduate students an opportunity to read and evaluate literature for children and young adults from an international perspective, that is, literature originating in a nation other than the United States.

LIS 5576. Information Needs of Adults (3). Selection criteria, aids in selection and evaluation of materials relative to adult needs, publishing and production trends. Emphasis is on contemporary print and non-print materials for public library collections.

LIS 5590. Museum Informatics (3). Provides an introduction to the study of how technical innovations influence the social world of museums by exploring the nature of information technology in museums and the way modern information systems have shaped the museum environment.

LIS 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). Principles and techniques of bibliographic organization, including the description, subject analysis, and retrieval of recorded knowledge and information in bibliographies, catalogs, and machine-based systems. Emphasis is on the application of AACR2, Sears, and L. C. Subject Headings and the Dewey Decimal classification in the organization of library catalogs.

LIS 5711. Cataloging and Classification (3). Prerequisite: LIS 5703. An examination of problems of entry, description, and subject analysis including L. C. classification. Also an analysis and evaluation of problems relating to the organization, operation, and management of a cataloging department.

LIS 5736. Indexing and Abstracting (3). Taking a practical approach to indexing and abstracting, this course covers manual and automatic processes and methods, database organization and design. Emphasis is on indexing and abstracting in an online environment with attention to production rules, standards, markup languages, and file organization.

LIS 5737. Subject Analysis (3). Theory of subject access; analysis, evaluation, and comparison of major systems of subject organization including study of PRECIS and the development of an original classification scheme in a subject area of the student's interest.

LIS 5771. Information and Image Management (3). The scope and problems of the administrative management of records. Emphasis on the importance of managing and controlling records from the time of their creation until their vital disposition.

LIS 5782. Database Management Systems (3). Examines the basic principles, elements and concepts of design, implementation and utilization of database management systems. Within database management systems, treats various models of data and databases. Also considers the administrative tasks associated in the database management environment.

LIS 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). 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 (0-12). (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). 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). Examines various topics, including data collection, analysis, and interpretation, as well as preparation of designs for conducting individual research in information studies. May be repeated to a maximum of six (6) semester hours.

LIS 6289. Seminar in Education for Information Studies (3). Within the framework of University and professional education, an examination of the aims, structures, and issues related to education for information issues. Includes curricular content and design, faculty, students and finance and administration.

LIS 6662. Seminar in Information Policy (3). Identifies/analyzes selected issues related to government information policies, and considers policy alternatives to better access state/federal information. Examines research methodologies to investigate information policies.

LIS 6759. Seminar in Intellectual Access (3). A thematic examination of issues in intellectual access. Possible topics include (but are not limited to) the relationship between the structure of knowledge and access to electronic information; knowledge structures for digital libraries; the social construction of information; and the impact of economic classification structures on access to information.

LIS 6909r. Directed Individual Study (1-8). (S/U grade only.) May be repeated 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, but not limited to, cataloging and classification; work with the disadvantaged; children and youth services; academic, public, school, and special libraries; administration; information science. Offerings will vary because of currency and the changing nature of the subject matter. May be repeated to a maximum of six (6) semester hours.

LIS 6980r. Dissertation (1-12). (S/U grade only.) Dissertation credits to be arranged in consultation with major professor. Maximum of twelve (12) semester hours may be taken in any given semester. All doctoral students must complete twenty-four (24) semester hours of dissertation as part of the program of study.

LIS 8964r. Doctoral Preliminary Examination (0). (P/F grade only.)

LIS 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

LIS 8976r. Master's Thesis Defense (0). (P/F grade only.)

LIS 8985r. Dissertation Defense Examination (0). (P/F grade only.)

INSTITUTIONAL RESEARCH: see Educational Leadership and Policy Studies

INSTRUCTIONAL SYSTEMS: see Educational Psychology and Learning Systems

Department of INTERIOR DESIGN

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Chair: Eric Wiedegreen; **Professor:** Wiedegreen; **Associate Professors:** Butler, Koenig, Munton, Myers, Ohazama, Waxman; **Assistant Professor:** Pable; **Professor Emerita:** Weale

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 sixty-five (65) semester hours. This program is designed for students with undergraduate degrees in areas other than interior design or architecture.

The master of science and master of arts post-professional 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 architecture. The focus is on specialized research to enhance professional potential through a thesis or thesis project. 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 a minimum of sixty (60) semester hours including a minimum of six (6) hours of thesis. 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, a resume, letter of intent, and an interview with the Director of Graduate Studies (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.

Definition of Prefix

IND—Interior Design

Graduate Courses

IND 5005. Survey of Interior Design (5). Foundation course. Under this course students without an undergraduate degree in interior design study the elements and principles of design, color theory, space planning, and technical skills. Credits do not apply to minimum degree requirements.

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 5157. Historical Restoration, Research and Documentation (3). Prerequisites: IND 5165, 5636. This seminar provides the opportunity for advanced study in the historiography, research and documentation of restoration and preservation procedures, sources of antiquity and reproductions.

IND 5165r. History of Interiors Seminar III (3). 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 5208. Design Fundamentals (3). This course centers on the study and development of two- and three-dimensional design projects using the elements and principles of design.

IND 5235. Graduate Studio I (3). Prerequisites: IND 5425 Graduate Technical Design. Advanced analysis and planning of interior environments. (Studio.)

IND 5236. Graduate Studio II (3). Prerequisites: IND 5435 Graduate Studio I. Advanced comprehensive design projects.

IND 5257. Graduate Studio III (3). Prerequisites: IND 5236. Graduate level studio focuses on non-residential projects in creative problem solving with emphases on programming, spatial analysis and open-office systems.

IND 5258. Graduate Studio IV (3). Prerequisites: IND 5257. This is an advanced graduate application of the design process in the form of a large scale project involving comprehensive research and execution in metrics. Emphases are on technological presentation techniques and systematic design development from concept to construction documents.

IND 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 5317. Design Graphics I (3). Advanced detailed study of graphic techniques used in interior delineation. (Studio.)

IND 5425. Graduate Technical Design (3). Advanced exploration of the technical aspects of interior design. May involve use of the CADD computer.

IND 5435. Graduate Lighting Seminar (3). Detailed study of lighting and electrical plans, reflected ceiling plans, calculations, and acoustics.

IND 5476. Computer-Aided Design I (3). Prerequisites: IND 5425. This class teaches computer-aided design and drafting using AutoCAD software. Students develop an understanding of how designers and architects use computers and how AutoCAD can be applied to other types of software.

IND 5477. Computer-Aided Design II (3). Prerequisites: IND 5476. This course is an advanced computer-aided design class focusing on tools and software to aid in three-dimensional design.

IND 5479. Construction Systems (3). Prerequisites: IND 5235. This lecture course focuses on general construction techniques, terminology and sustainability. Integration of the building systems of structure, plumbing, mechanical and fire safety is emphasized.

IND 5508. Professional Practices (3). Prerequisites: IND 5236. Advanced analysis and research into the theory and philosophy of professional interior design practice with emphasis on business development, management, marketing and contract administration.

IND 5526. Graduate Portfolio Review II (1). (S/U grade only.) 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 5609. Graduate Seminar: Social-Psychological Aspects of Design (3). This course is an exploration of the relationship between humans and their environment through the study of personal and social use of space, proxemics, spatial analysis, and the effects of the environment on human behavior.

IND 5636. Graduate Seminar: Design Theory and Criticism (3). This course is a survey of the aesthetic, political, economic and social theories that have shaped modern design, including critical methods applied to design integral to culture and human expression.

IND 5637. Graduate Seminar: Research Methods in Design (3). This course is designed to give students a basic introduction to the fundamentals of research in interior design. Included in this course are a survey of the major types of research and an overview of what is involved in the inception, planning, and conduction of a research project.

IND 5638. Graduate Seminar: Design Issues (3). This course provides a critical appraisal of the historical, philosophical, and contemporary trends and issues in the design field.

IND 5910r. Directed Individual Study (1-3). (S/U grade only.) Student has the opportunity to pursue independent work under the direction of a faculty member. May be repeated to a maximum of twelve (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 (1-6). (S/U grade only.) A minimum of six (6) semester hours credit is required.

IND 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

IND 8976r. Master's Thesis Defense (0). (P/F grade only.)

Program in INTERNATIONAL AFFAIRS

COLLEGE OF SOCIAL SCIENCES

Director: Lee K. Metcalf, Department of Political Science

International affairs are 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.

Study Abroad Programs

International affairs students are encouraged to participate in the University's intensive session held each summer. Programs designed for graduate students are available in London, Prague, Dubrovnik, Panama, and Moscow. A fall program is also available in London. The programs are designed to expose students to a wide variety of issues and resources relating to their curriculum in an international setting.

Internships

The Program in International Affairs provides a variety of internship opportunities designed to supplement course work toward the master's degree. Some internship placements are with agencies and businesses in Florida's capital that work in the international arena. Others are available in Washington D.C. through our partnership with the Washington Center Program. Students can also apply for one of the several internships available in London where we place our students in Parliament, the American Embassy, Amnesty International, NBC, the Associated Press, the British-American Chamber of Commerce, and other significant organizations. Internship placements are also available in Brussels, Paris and other European cities. All internships must be approved in advance by the program director.

Requirements

A candidate is admitted to the program by meeting the University's general requirements for graduate admission and by recommendation

of the director and executive committee of the program. 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 5012, Problems of Globalism (3) semester hours; and INR 5938, Joint Seminar in International Affairs (3) semester hours
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
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 modern foreign language will be demonstrated by either: 1) passage of a Graduate Reading Knowledge Exam administered by the Department of Modern Languages and Linguistics at Florida State University; 2) 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 Courses

Note: A description of the following courses can be found under "Graduate Courses" in this chapter.

- INR 5012 Problems of Globalism (3)
 INR 5935r Special Topics [Colloquium] (1-3)
 INR 5938 Joint Seminar in International Affairs (3)

Recommended Courses

Note: Descriptions of the following courses can be found under the departmental listings.

Anthropology

- ANG 5275 Human Conflict: Theory and Resolution (3)
 ANG 5309 Conquest of the Americas (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)
 ECS 5028 Economies in Transition (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)
 GEA 5353 Human Dimensions of Global Environmental Change (3)
 GEO 5358 Environmental Conflict and Economic Development (3)
 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 Détente (4)
 EUH 5338 History of East Central Europe, 1815 to the Present (4)
 EUH 5365 The Balkans Since 1700 (4)
 EUH 5457 The Age of the French Revolution, 1715-1795 (4)
 EUH 5467 Nazi Germany (4)
 EUH 5509 Modern Britain Since c. 1870 (4)
 EUH 5578 19th-Century Russia (4)
 EUH 5579 20th-Century Russia (4)
 EUH 5608 European Intellectual History, 1500-1800 (4)
 EUH 5609 European Intellectual History, 1800 to the Present (4)
 HIS 5256 War and the Nation State (4)
 LAH 5439 History of Mexico (4)
 LAH 5475 History of the Caribbean (4)
 LAH 5727 Race and Class in Colonial Latin America (4)
 LAH 5749 Social Revolutionary Movements in Latin America (4)
 WOH 5238 Disease, Race, and the Environment (4)
 WOH 5246 World War II (4)

Philosophy

- PHH 5505r 19th Century Philosophy (3)
 PHH 5609r Contemporary Philosophy (3)
 PHI 6607 Ethics (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 5644 Russian Politics (3)
 CPO 5740 Comparative Political Economy (3)
 CPO 5934 Selected Topics (3)
 INR 5014 Contexts and International Relations (3)
 INR 5036 International Political Economy (3)
 INR 5037 Development, Dependence, and Inequality (3)
 INR 5088 International Conflict (3)
 INR 5090 Rational Choice and International Relations (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 5332 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 5306 Political Sociology (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)
 URP 5847 Growth and Development of Cities (3)

Definition of Prefixes

INR—International Relations

Graduate Courses

- INR 5012. **Problems of Globalism (3).** This is a core course for all international affairs graduate students providing background for a theoretical and practical understanding of globalization and the international organizations that are significant actors in this process.
 INR 5906r. **Directed Individual Study (1–3).** (S/U grade only.) May be repeated to a maximum of twelve (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).** (P/F grade only.)
 INR 8976r. **Master's Thesis Defense (0).** (P/F grade only.)

INTERNATIONAL/INTERCULTURAL DEVELOPMENT EDUCATION:

see Educational Leadership and Policy Studies

INTERNATIONAL RELATIONS:

see Political Science

ITALIAN LANGUAGE, LITERATURE:

see Modern Languages and Linguistics

JAPANESE:

see Asian Studies; Modern Languages and Linguistics

JAZZ STUDIES:

see Music

LANGUAGE ARTS AND ENGLISH EDUCATION:

see Childhood Education, Reading, and Disability Services; English; Middle and Secondary Education

LATIN AMERICAN HISTORY:

see History

LATIN: LANGUAGE STUDIES:

see Classics

LAW

COLLEGE OF LAW

Professors: Atkinson, Banoff, Christie, Craig, Dodge, Ehrhardt, Gey, Griffith, Hirsch, Markell, Rossi, Ruhl, Seidenfeld, Shepherd, Stern, Van Doren, Weidner, Yetter; **Associate Professors:** Bassett, Lee, Powell, Southerland; **Assistant Professors:** Bridgeman, Galle, Klick, Luke, Markel, Priester, de Larena, Wexler; **Associates in Law:** Annino, Gertz, Krieger, Stone; **Visiting Associates in Law:** LaVia, Wolf; **Assistants in Law:** Blenkhorn, Bodell; **Visiting Assistants in Law:** Matthews, Taylor; **Edward Ball Eminent Scholar:** Abbott; **Tobias Simon Eminent Scholar:** Tesón; **Professors Emeriti:** Dickson, George, Kennedy, Larson, Morse, Oeltjen, Schroeder, Slagle, VanDerCreek, Vinson

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 College of Law prepares 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

Graduate 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 (2-3).** Legal writing techniques, practical work in analyzing legal problems, preparation of an appellate brief, and the argument of an appellate case. Follows LAW 5792. 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 (2-3).** Principles of commercial paper; system of bank deposits and collections, including the relationship of the commercial bank and its customer. The use of commercial paper in documentary exchanges is also covered.
- LAW 6030. Secured Transactions (2-3).** Security interests in personal property; creation, perfection, priority, and enforcement security interests under UCC Article 9; effect of bankruptcy on secured transactions.
- LAW 6035. Commercial Law Survey (1-4).** Basic introduction to and survey of the law of sales, leases, commercial paper, fund transfers, letters of credit and secured transaction under the Uniform Commercial Code.
- LAW 6060. Business Associations (4).** General principles of law relating to agency and partnerships, followed by a more detailed study of the modern business corporation. Formation and structure of the corporation, powers, controls, and obligations of officers and directors, rights and liabilities of stockholders, rights of creditors, stockholder's representative actions.
- LAW 6062. Agency and Partnership (2-3).** A study of the basic principles of agency and partnership law, including limited partnerships, limited liability partnerships, and limited liability companies.
- LAW 6080. Insurance Law (2-3).** An overview of insurance theory and regulation with emphasis on recurring coverage litigation and interpretation of insurance contracts.
- LAW 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 5501/5502, 5300. Federal court system; examination of original and removal jurisdiction of United States District Courts; relationships between state and federal courts at all levels.
- LAW 6310. Alternative Dispute Resolution (2-3).** Introduction to non-judicial mechanisms for the resolution of disputes, including interviewing and counseling, negotiation, mediation, and arbitration, and the development of basic ADR skills using role-playing exercises and simulations.
- LAW 6312. Mediation (3).** Introduction to mediation theory and practice and development of basic mediation skills using role-playing exercises and simulations.
- LAW 6315. Arbitration (3).** Basic introduction to the law and process of arbitration.
- LAW 6321. Remedies (3).** Prerequisites: LAW 5000, 5400. A study of legal and equitable remedies and procedures available including compensation, restitution, exemplary damages, injunctive forms of relief, specific relief under various legal circumstances, such as reformation, rescission, and restitution.
- LAW 6330. Evidence (4).** Prerequisite: LAW 5300. Rules of evidence developed by common law courts and legislatures; rules of evidence, federal and state; special emphasis on judicial notice, examination of witnesses, privilege and competency, constitutional provisions, relevancy, remote and prejudicial evidence, best evidence rule, opinion and expert testimony, hearsay rule and its exceptions, burden of proof and presumptions, judge and jury.
- LAW 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 (1-4).** This course is a study of the legislative, executive and judicial control of administrative action.
- LAW 6524. Statutory Interpretation (3).** Statutory and quasi-statutory legal materials: their use and interpretation.
- LAW 6530. Local Government Law (3).** An examination of the powers, limitations, and special legal considerations concerning local governments. Special consideration is given Florida problems concerning county and municipal governing bodies.
- LAW 6545. Employment Law Survey (3-4).** Survey of basic legal and policy concepts governing the employment relationship.
- LAW 6550. Antitrust Law (2-3).** Introductory study of contemporary U.S. antitrust law and federal policy regarding regulatory control of the competitive process in the American economy.
- LAW 6555. Law and Economics (3).** Introduction to basic microeconomic principles necessary for lawyers to understand economic analysis as used in the legal literature and to use and evaluate legal arguments that rely on economic analysis.
- LAW 6571. Intellectual Property I (2-3).** A survey of patent, trademark, and unfair competition law.
- LAW 6572r. Intellectual Property II (2-3).** Recommended prerequisite: LAW 6571. Survey of federal copyright law and closely related doctrines. A study of the Copyright Act, including protectable subject matter, scope of protection, remedies for infringement, and permissible use of copyrighted material. May be repeated to a maximum of five (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 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 (2-3).** Prerequisite: LAW 6060. Advanced study of economic principles and legal rules pertaining to the public and private funding and restructuring of business corporations.
- LAW 7111. Constitutional Criminal Procedure I (2-3).** Advanced study of selected federal constitutional constraints on the law enforcement evidence-gathering and investigative process.

- LAW 7113. Constitutional Criminal Procedure II (2-3).** Advanced study of selected federal constitutional constraints on the criminal justice adjudicatory process.
- LAW 7116. Florida Criminal Practice (2-3).** Prerequisite: LAW 5100. Advanced study of selected issues regarding Florida criminal practice and procedure.
- LAW 7210. Jurisprudence (1-4).** A survey of contemporary jurisprudential thought.
- LAW 7227. American Legal History I (2-3).** Survey of early American legal history (circa 1600-1800), including the British background, the first state constitutions, the Articles of Confederation, the Constitutional Convention and ratification debates, and the adoption of the Bill of Rights. May also cover the development of the American judicial system and sources of early American law.
- LAW 7228. American Legal History II (2-3).** Survey of 19th century American legal history, including the Marshall Court, slave law, the impact of the Civil War and Reconstruction, Indian law, and the effects of industrialization.
- LAW 7229. American Legal History III (2-3).** Survey of modern American legal history (since 1890), including the erosion of private law, the rise of legal realism, and the development of judicial standards.
- LAW 7233. Cyber Law (2-3).** Introduction to legal issues regarding the Internet, including first amendment, privacy, tort liability, and copyright.
- LAW 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 Environmental Law (2-3).** This is a problem-oriented course focusing on issues including marine pollution, transboundary movement of hazardous waste, climate change, biodiversity, the relation of population and the environment, and other global and transboundary environmental problems. This course is usually offered every other year.
- LAW 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 toward Native Americans. It will also discuss issues 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 7307. Advanced Civil Procedure (2-3).** Advanced study of selected topics regarding federal civil procedure, especially class actions and other multi-party litigation.
- 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 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 7475. Coastal and Ocean Law (2-3).** Advanced study of property law, water and natural resources law, and constitutional law from the perspective of the special needs of the coasts and oceans.
- LAW 7476. Law of the Sea (2-3).** A study of the international law of the sea, including navigation rights, marine resources, and environmental problems.
- LAW 7477. Environmental Issues in Business Transactions (2-3).** A study of environmental issues arising in the context of business transactions such as real estate development and sales, leases, lending agreements, corporate mergers and acquisitions, and securities disclosure.
- LAW 7481. Energy Law and Policy (2-3).** Advanced study of current energy law and policy, including the extraction, conversion, and distribution of energy resources.
- LAW 7482. Endangered Species Protection Law (2-3).** Advanced study of the protection of at-risk species under the Endangered Species Act, and of contemporary law and policy regarding ecosystem management and biodiversity conservation.
- LAW 7503. State Constitutional Law (3).** General principles of constitutional law under the constitution of Florida. Judicial function in constitutional cases, powers of the branches of state government, local government powers, individual rights.
- LAW 7504. Supreme Court Roleplay (2-3).** Prerequisite: LAW 5501. Roleplaying seminar in which students act as current United States Court Justices to decide three actual cases pending on the Court's docket after briefing and oral argument by student advocates.
- LAW 7510r. Civil Rights (2-3).** Prerequisites: LAW 5501 and 5502. Focus on selected federal statutes enacted to remedy violations of federal constitutional rights. The principal Reconstruction Era Statutes, 42 U.S.C. Sections 1981, 1982, and 1983, are examined in depth. May be repeated to a maximum of five (5) semester hours.
- LAW 7511r. First Amendment (2-3).** Prerequisites: LAW 5501 and 5502. A study of First Amendment principles and their application in modern areas of communications practice. The course will develop theory, explore policy considerations, and expose students to parties that have participated in several significant media law cases. May be repeated to a maximum of five (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 (2-3).** Legislative and judicial control of state administrative action. Major emphasis is on the impact of the Florida Administrative Procedures Act on selected state agencies in their rulemaking and adjudicating functions.
- LAW 7549. Employment Discrimination (3).** Study of the various statutes and executive orders governing the employment relationship relating to discrimination on the basis of sex, race, age, religion, color, national origin, and sexual preference.
- LAW 7560. Securities Regulation (3).** Prerequisite: LAW 6060. Regulatory aspects of corporate finance, concentrating heavily on the fundamentals of the Securities Act of 1933 and the Securities Exchange Act of 1934.
- LAW 7565. Securities Litigation Seminar (2).** Prerequisite: LAW 6060. Advanced study of selected issues involving litigation under the federal or state securities laws.
- LAW 7574. International Aspects of Intellectual Property (2-3).** Advanced study of law and policy for the protection of intellectual property rights (IRPs) on an international basis, including framework created by various treaties and conventions.
- LAW 7575. Entertainment Law (2-3).** Advanced study of the law pertaining to the entertainment industry, with special emphasis on transactional planning.
- LAW 7581. Sports Law (2).** Advanced study of state and federal laws relating to the business of amateur and professional sporting competition as entertainment.
- LAW 7613. Taxation of Business Entities II (2-3).** Prerequisites: LAW 6600, 6618. Advanced study of the federal income tax treatment of mergers, acquisitions, and other reorganizations and divisions involving corporations, partnerships and limited liability companies.
- LAW 7660. Tax Policy (2).** This seminar will evaluate topics such as the choice of a tax base (income or consumption), rate structure (flat or progressive), taxable unit (individual or family), and method of government spending (direct or through the tax system via tax expenditures) against the tax policy norms of equity, efficiency, and administrability to determine how well the present tax system satisfies these norms.
- LAW 7680r. International Tax (2-3).** Prerequisite: LAW 6600. A study of the federal income tax laws and international tax treaty provisions that apply to transactions that cross international boundaries. May be repeated to a maximum of five (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 (2-3).** Advanced workshop on Florida marital dissolution law.
- LAW 7722. Bioethics and the Law (3).** Advanced study of law and values in health care and the biomedical sciences.
- LAW 7730. Admiralty Law (2-3).** Introduction to the law of the sea, including maritime jurisdiction.
- LAW 7750. Professional Responsibility (3).** A required course in satisfaction of the Florida Bar requirement for curricular study of the aspirational and disciplinary regulations of the integrated bar. Critical attention is given to the exclusionary and anticompetitive practices of the organized Bar, and to controversy over the deficiencies of various codes and formal (and informal) advisory opinions on professional behavior. The course is intended to furnish some insight into the customs and courtesies, sociology, and expectations of lawyers performing their various tasks in a variety of environments.
- LAW 7760. Accounting and the Law (2-3).** Study of accounting concepts and policies and their effect upon rules of law.
- LAW 7795. Advanced Writing Skills: Appellate Briefs (2).** Prerequisites: LAW 5792, 5793. Advanced skills course designed to strengthen students' analytical, writing, and research skills, using appellate advocacy as the context.
- LAW 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: Michael Leeser, Lara Reglero, and Gretchen Sunderman (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 Linguistics

Department of MANAGEMENT

COLLEGE OF BUSINESS

Chair: Bruce T. Lamont; **Professors:** Ferris, Fiorito, Hoffman, Lamont, Martinko, Perrewé, Stepina; **Associate Professors:** Combs, Douglas, Hochwarter, Matherly; **Assistant Professors:** Humphrey, Ranft, VanIddekinge; **Associates in Management:** Diez-Arguelles, O’Connor, Ryals, Simmons, Trammell; **Assistants in Management:** Blass, Bowers; **Frances Eppes Professor of Management:** Ferris; **J. Frank Dame Professor of Management:** Fiorito; **Carl DeSantis Professor of Business Administration:** Lamont; **Bank of America Professor of Business Administration:** Martinko; **Jim Moran Professor of Business Administration:** Perrewé

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, organizational 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 a major in risk management and insurance. This program is administered through the Department of Risk Management and Insurance.

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

Additional information on this program can be found in the College of Business section of the *Graduate Bulletin*, or at <http://www.cob.fsu.edu/grad>.

Doctoral Degree

The college offers a PhD in business administration. The management department offers two concentrations in the PhD program: organizational behavior and human resource management, and strategic management. The management major prepares students for teaching and research at the university level.

Graduates have been placed at universities throughout the United States, including Auburn University, Florida International University, Florida Atlantic University, University of 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 Prefixes

HFT—Hospitality Management

MAN—Management

Graduate Courses

Master’s

Note: The 5000 level courses are reserved exclusively for graduate students. No courses carrying both undergraduate and graduate credit are offered. Courses which may be repeated for credit are designated by “r” immediately following the course number.

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.

Department of MANAGEMENT INFORMATION SYSTEMS

COLLEGE OF BUSINESS

Chair: David B. Paradice; **Professors:** George, Paradice; **Assistant Professors:** Bush, Carter, Chudoba, Gallagher, Wasko; **Associates in Management Information Systems:** Fisher, Payne, Wells; **Thomas L. Williams Jr. Eminent Scholar:** George; **Sprint/United Telephone of Florida Professor:** TBA

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

The master of science in management information systems (MS in MIS) is an online program only. Students must complete thirty-three (33) semester hours. The program is designed so that students can complete the degree in 24 months by taking two online courses each semester. Students may choose to complete either a managerial track or a technical track. Entry into the program occurs only in the fall semester; deadline for receipt of all application materials is June 1 (March 1 for international students).

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 Prefix

ISM—Information Systems Management

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 5245. Organizational Behavior (3). A dynamic examination of managerial concepts of human behavior in work organizations.

MAN 5305. Personnel/Human Resource Management (3). Survey course covering strategic practices and problems in human resource management. Topics include job analysis, selection, training, compensation, and other employee rights.

MAN 5721. Strategy and Business Policy (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 toward 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). (P/F grade only.)

MAN 8976r. Master's Thesis Defense (0). (P/F grade only.)

Doctoral

Note: The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases master's candidates may elect 6000 level courses with permission of the instructor and the associate dean for academic programs.

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 6306. Doctoral Seminar in Human Resource Management (3). An advanced research seminar in human resources management. The scope and coverage of the seminar representatively reflect the important content areas in the field and the major theoretical and empirical contributions in each area.

MAN 6795r. Doctoral Seminar in Strategic Management: Selected Topics (3). An examination of selected topics in strategic management. Frequently, one term examines strategy formulation and the next examines strategy implementation.

MAN 6911r. Supervised Research (1-3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five (5) semester hours.

MAN 6917. Doctoral Seminar in Management Research: Research Design (3). This course covers theory and hypothesis testing, measurement of constructs, publication strategies, and various special topics in empirical research.

MAN 6932. Doctoral Seminar in Strategic Management I: Literature (3). Study of organizational strategies and policies of the literature and analysis of conceptual and empirical research issues in strategic management.

MAN 6933r. Doctoral Seminar in Organization Behavior: Special Topics (3). An examination of special topics in organizational behavior. Topic changes from term to term.

MAN 6934. Doctoral Seminar in Management Research: Data Analysis (3). Hands-on application of statistical tests utilizing computer packages to analyze various databases.

MAN 6941r. Supervised Teaching (1-3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five (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). (P/F grade only.)

MAN 8985r. Dissertation Defense Examination (0). (P/F grade only.)

MANAGEMENT:

see also *General Bulletin*; Management Information Systems; Sport Management, Recreation Management, and Physical Education

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 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 5118. Advanced Systems Analysis and Design (3). This course builds on basic systems analysis and design concepts including distributed systems analysis and design. Use cases, quality assurance, performance metrics, and current trends are investigated.

ISM 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 5207. Advanced Database Management (3). This course builds on basic database concepts. Topics include physical database design, advanced SQL, data warehousing, data mining, XML data and schemas, database administration and data center administration.

ISM 5226. Network Development and Management (3). This course will provide good exposure to the basic telecommunications technology concepts, standards, products and services, and the emerging developments in telecommunications, and will provide an understanding of the business context of telecommunication technologies.

ISM 5227. Advanced Telecommunications Management (3). This course builds on basic telecommunications and network management concepts. Topics include physical layer propagation, advanced switch operation, wireless environments, LANs, WANs, network applications, and a comparison of client/server versus Web applications.

ISM 5315. Project Management (3). This course has been designed to be relevant for all professionals confronting project-related tasks, with particular attention given to the information systems context. Course content includes an overview of technology, an introduction to software development approaches, facets of project management, and organizational issues related to successful project management.

ISM 5316. Advanced Project Management (3). Prerequisite: ISM 5315. This course extends the concepts of project management to the management of multiple projects across time and space, including the management of projects outside of the organization through outsourcing, strategic alliances, and off-shore arrangements.

ISM 5327. Corporate Information Security (3). This course examines corporate information security from several perspectives. Topics include differences in security of physical versus digital assets; sources of security threats; solutions involving technology, people, and policy; and proper responses to attacks on digital assets.

ISM 5428. Knowledge Management and Business Intelligence (3). This course examines knowledge management and business intelligence from an organizational perspective covering principles of knowledge management and business intelligence. Topics include strategic issues; systems design and development; and knowledge creation, capture, sharing, and application.

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 5507. E-Business (3). This course examines e-business models. Topics include the application of business strategy, consumer behavior, and customer relationship theories in e-business environments; business-to-business and business-to-consumer arrangements; and supply chain and other e-business infrastructure issues.

ISM 5906r. Directed Individual Study (1-3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. Each course is repeatable up to three times.

ISM 5907r. Special Studies in Management: Information and Systems Management (1-3). Prerequisite: Consent of associate dean for academic programs. Each course is repeatable up to three times.

ISM 5935r. Special Topics in Information and Management Sciences (1-3). In-depth study of current topics in information and management sciences. May be repeated to a maximum of three (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). (P/F grade only.)

ISM 8976. Master's Thesis Defense (0). (P/F grade only.)

Doctoral

Note: The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases, master's candidates may elect 6000 level courses with permission of the instructor and the associate dean for academic programs.

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). (P/F grade only.)

ISM 8985. Dissertation Defense Examination (0). (P/F grade only.)

MARINE BIOLOGY see Biological Science

Department of MARKETING

COLLEGE OF BUSINESS

Chair: Michael Hartline; **Professors:** Brusco, Cronin, Downs, Flynn, Giunipero, Goldsmith, Hofacker, Showalter; **Associate Professors:** Brady, Hartline, Knight; **Assistant Professors:** Darke, Kim, Lee, Smith; **Associate in Marketing:** Brennan; **Assistants in Marketing:** Larsen, Pallentino; **Richard M. Baker Professor of Marketing:** Goldsmith; **Carl DeSantis Professor of Business Administration:** Cronin; **Charles A. Bruning Professor of Business Administration:** Hartline

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: MAN5501, Operations Management; 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.

MAN 5501. Operations Management (3). Develops a conceptual framework which is useful in describing the nature of the operations function, with emphasis on identifying basic issues in managing the operations of a service organization.

MAN 5601. Multinational Business Operations (3). Graduate survey of international business. Concepts of international economics blended with the marketing of goods and services in international markets. Current international events discussed.

MAR 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 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 toward 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 toward 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). (P/F grade only.)

MAR 8976r. Master's Thesis Defense (0). (P/F grade only.)

QMB 5755. Studies in Operations Research (3). Introductory treatment of operations research methodology, with emphasis on applications of network, inventory, scheduling, and queuing decision models to business and management.

QMB 5906r. Directed Individual Study (1-3). (S/U grade only.) Prerequisite: 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). (P/F grade only.)

MAR 8985r. Dissertation Defense Examination (0). (P/F grade only.)

Program in MARRIAGE AND FAMILY

COLLEGE OF HUMAN SCIENCES

Program Director: Robert E. Lee; **Training Director:** Mary Hicks; **Professors:** Cornille, Darling, Hicks, Mills, A. Mullis, R. Mullis, Readdick, Rehm

The Doctoral Program in Marriage and Family Therapy at Florida State University, in the Department of Family and Child Sciences, College of Human Sciences, is one of the most distinguished in the nation. It attracts students from across the country and around the world. It is one of the oldest doctoral programs accredited by the Commission for Accreditation for Marriage and Family Therapy Education (COAMFTE) of the American Association for Marriage and Family Therapy (AAMFT).

The doctoral MFT program shares the vision of the Department of Family and Child Sciences of which it is a living part. Its concern is with understanding family systems in interaction with their environments along the lifespan, and best practices in relational interventions. Accordingly, the program requires a substantial foundation in family science and a commitment to human diversity. MFT increasingly is being practiced by diverse individuals with diverse clients with diverse goals in diverse settings. A credible program of applied family science must incorporate empirically validated interventions that appreciate contextual issues and it must recognize the existence and value of multiple realities. Accordingly, the Department and MFT clinical faculty are committed to applied family scholarship and acquiring individuals - faculty, students, and clients - with diverse voices and lived experiences.

MFT graduates are expected to compete successfully for faculty positions in family science, MFT, and related fields, occupy high-level administrative and policy making/consultation positions, and/or provide and train others to provide MFT in a wide range of settings. Therefore, the focus of the MFT program is to provide education and training in theory, research, and evidence-based clinical practice while working with diverse individuals, couples, families, and settings.

Requirements

To apply to the Doctoral Program in Marriage and Family Therapy, contact the program assistant, 225 Sandels Building, College of Human Sciences, Florida State University, Tallahassee, FL 32306-1491; (850) 644-3217.

In general, applicants should hold a master's degree in marriage and family therapy, psychology, social work or a related field, and have at least a year of clinical experience. They should have 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 1st to be considered for the fall term. Those interested in being considered for competitive University fellowships should apply by November 1st. The most qualified candidates will be invited to attend an on-campus 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 COAMFTE-accredited programs include a minimum of fifty-one (51) semester hours of course work, twelve (12) semester hours of formal internship credits, and twenty-four (24) semester hours of dissertation credits. The course requirements include a minimum of twelve (12) semester hours of family science, eighteen (18) semester hours of research methodology, twelve (12) semester hours of best practices family interventions, and nine (9) hours of clinical practicum. Students who satisfactorily complete their course work undergo comprehensive examination and, if successful, are admitted to doctoral candidacy. They then must complete a formal internship and the dissertation process.

The sequence of courses generally takes two years, including Summer semesters. Full time attendance is required. Students who do not have a master's degree in marriage and family therapy must complete additional course work and clinical experience 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 must document at least 1000 direct client contact hours with appropriate supervision.

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 backgrounds. Presenting problems have included difficulties in couples and family relationships, parenting issues, divorce and post-divorce issues, sexual and physical abuse, domestic violence, alcohol and substance abuse, self esteem issues, depression, anxiety, blended families, school stress, marital and premarital issues, and court ordered therapy.

Before graduating from the doctoral program, all students will have completed 1000 hours of direct client contact. Graduates of COAMFTE-accredited master's programs will therefore need to acquire 500 additional hours meeting COAMFTE accreditation standards. 200 of these hours will be at the Center for Marriage and Family Therapy and must be completed if the student is to be eligible for his or her Comprehensive Examination(s). In addition to these clinical hours, students who do not have a master's degree in Marriage and Family Therapy from a COAMFTE-accredited program are responsible for completing all of the COAMFTE Standard Curriculum courses and clinical requirements in addition to the doctoral program requirements. These include 500 direct client contact hours, half of which are relational, under the supervision of an AAMFT Approved Supervisor or a designated equivalent. No part of the Standard Curriculum may be waived. Courses and clinical hours thought to be equivalent to that required in

the Standard Curriculum require approval of the supervisory faculty. All clinical hours must be accomplished at the Center for Marriage and Family Therapy, under the supervision of the program's clinical faculty. Upon entering the program, each non-COAMFTE master's graduate will negotiate a training contract with the MFT Program Director which specifies how the students and the program will allow the requirements of the Standard Curriculum to be met.

Supervision

The clinical faculty conduct supervision in accordance with COAMFTE guidelines. Supervision includes individual and group supervision using live, digitally-recorded, and case presentation formats. At least one hour of supervision is provided for every five hours of client contact on a weekly basis for all registered practicum students. All students enroll in practicum until they start their block internship and dissertations.

Research

The faculty believe that the value added by a doctorate in MFT is advanced scholarship. Therefore, the students and faculty collaborate in a wide range of clinical and theoretical research projects, presentations, and publications, from quantitative studies to qualitative studies.

This information covers only a small part of the Doctoral Program in MFT policies and procedures. For additional information, please contact the Program Office at (850) 644-3217.

MASS MEDIA COMMUNICATIONS:
see Communication

Department of MATHEMATICS

COLLEGE OF ARTS AND SCIENCES

Chair: Philip L. Bowers; **Associate Chair:** Bellenot; **Associate Chair for Graduate Studies:** Case; **Director of Basic Mathematics:** Stiles; **Director of Applied Mathematics:** Q. Wang; **Director of Biomedical Mathematics:** Quine; **Director of Financial Mathematics:** Nichols; **Director of Pure Mathematics:** Aluffi; **Professors:** Aluffi, Bellenot, Bowers, Case, Erlebacher, S. Fenley Gunzburger, Heil, Huckaba, Hussaini, Klassen, Kopriva, Mesterton-Gibbons, Mio, Navon, Nichols, Oberlin, Peterson, Quine, Seppala, Sumners, Tam, Q. Wang, Xm Wang; **Associate Professors:** Bertram, Hironaka, Kercheval, Magnan, Nolder, Okten, Stiles, Sussman, van Hoeij; **Assistant Professors:** Agashe, Aldrovandi, Cogan, Ewald, Goncharov, Horne, Hurdal, Kim, Musliami, Tempone, Xq Wang; **Coordinators of Actuarial Science:** Case, Paris; **Professors Emeriti:** Blumsack, Bryant, Gilmer, Heerema, Howard, Hunter, Kreimer, Mott, Wright; **Courtesy Professors:** Banks, Beaumont, Chen, M. Fenley, Gallivan, Gan, Marcolli, Mascagni, Tabak, Zeichiedrich

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, corporate, and governmental sectors. PhD and master's degrees are offered with concentrations in applied and computational, biomedical, financial, and pure mathematics.

The department has cooperative relationships with science and engineering departments, the College of Medicine, and many institutes on campus. We have strong connections with the National High Magnetic Field Laboratory, the School of Computational Science, the Center for Applied Vision and Imaging Sciences, the Geophysical Fluid Dynamics Institute, and the Institute for Molecular Biophysics. 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. Aside from a wide 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 course work in biochemistry, computer science,

economics, engineering, finance, molecular biology and biophysics, physics, risk management, and statistics. Students also participate in the weekly colloquia, the self-run graduate student seminar, and may attend any subset of up to a dozen seminar series. Seminar series topics vary according to the current areas of interest of the department.

The faculty of the department includes a Francis Eppes Professor, two Robert O. Lawton Distinguished Professors, an Eminent Scholar Chair in High Performance Computing, three Distinguished Research Professors, three faculty holding named professorships, two recipients of Developing Scholar Awards, and more than a dozen recipients of University Teaching and Advising Awards. The four graduate program areas of theory and applications give opportunities for graduate student and faculty research, publication, and recognition in a variety of specializations: algebraic geometry, biomathematics, conformal mapping, complex analysis, dynamical systems, computational acoustics, computer visualization, cryptology, financial mathematics and computational finance, computational fluid dynamics and rheology of complex fluids, game theory, geometry, harmonic analysis, high performance computing, history and biography, human brain mapping, knotting of DNA, mathematics education, mathematical physics, multiscale modeling of complex systems, number theory, numerical analysis, PDEs, probability, protein geometry, symbolic computation, and topology.

For all students, the University provides Internet access, course Web pages 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 graduate computer labs with high-speed workstations. Faculty and students in the department have access to a variety of special mathematical software, which is used in courses and in research. For additional information, or for an on-line application, see the departmental Web site and links at <http://www.math.fsu.edu>. For more information about computing resources at FSU, see <http://www.ucs.fsu.edu>.

Graduate Requirements

There are both University- and college-wide degree requirements that apply to all graduate students; these are summarized in the appropriate chapters of this *Graduate Bulletin*.

There are often revisions enacted since this publication to the degree guidelines and the course information listed below; the student should obtain any revisions from the departmental Web site or the department's main office.

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

The department offers four major options for the master's degree. Course choices within the guidelines of a major are made in conference with the director of a program or an adviser appointed by the chair of the department. For all options, the student should consult the updated degree guidelines and requirements and additional information available at the departmental office and on the Web site.

Hours from the courses MAT 5911r, 5921r, 5941r, and 5946r are not applicable toward any program; MAT 5907r, seminars, and internships may be counted only with special departmental permission. No 4000-level course in this department may count toward the master's degree. A student who has successfully completed MAT 8964 and is admitted to doctoral candidacy will be deemed to have qualified for a master's degree, subject to University regulations.

Options A and B may be either course type (thirty-two [32] or more semester hours of graduate courses with a comprehensive examination and excluding MAT 5971r) or thesis type (thirty [30] or more semester hours including six [6] semester hours in MAT 5971r and appropriate thesis defense). These options will include at least twenty-two (22) semester hours in courses offered by the department. A student may pursue a "Directed Program of Study" with a particular object or concentra-

tion motivating substitutes for some requirements but including most of those of A or B below. For example, a student interested in preparing for mathematics specialist or community college teaching may arrange a relevant program. Early planning of a special program is necessary, and the student should work closely with a faculty member from the first semester of residence.

Options C and D are professional degrees requiring thirty-six (36) semester hours including a final semester projects class. Students develop a mix of mathematical, statistical, and computational skills underpinning specialized knowledge in science, finance, or economics.

- A. **Mathematics.** The pure mathematics option gives the student a well-rounded exposure to the foundations of modern mathematics. Course work includes graduate sequences in algebra, real and complex analysis, and topology. Electives include more advanced courses in these disciplines as well as more applied topics such as symbolic computation, modeling, and statistics. The master's degree in pure mathematics provides excellent preparation for many careers in education, industry, and government. It is also an appropriate first step for those students who wish to pursue a PhD, either in mathematics or in some other discipline that uses mathematics or rigorous logical thinking.
- B. **Applied and Computational Mathematics.** This option provides students with extensive research and educational experiences in modeling, analysis, algorithm development, and simulation for problems arising throughout mathematics, sciences, and engineering. There are currently two tracks within this option: the applied mathematics track and the computational mathematics track. After completing this master's degree, students may choose to pursue a doctoral degree in the area of applied and computational mathematics or related areas, or pursue educational, financial, industrial, or governmental jobs involving applications of mathematical and computational skills.
- C. **Financial Mathematics.** This professional degree prepares students for work in financial institutions and markets and also for doctoral research in mathematical finance. The Financial Mathematics Festival brings practitioners from the financial sector to talk about the problems they solve and the opportunities available. In cooperation with faculty from computer science, economics, finance, risk management, and statistics, a student's program is designed to include individually appropriate choices meeting the guidelines. A secondary concentration in actuarial science may be elected within the degree requirements. Specialized courses have been developed specifically for this program. Students are also encouraged to pursue internship opportunities.
- D. **Biomedical Mathematics.** Studies in this interdisciplinary program include specialized mathematics courses, laboratory experiences, and supporting courses from the departments of statistics, biological science, chemistry, and computer science, and the Institute of Molecular Biophysics. Course work, workshops, and corollary activities prepare students to work in bioinformatics or mathematical applications to genomic, biomedical, or biophysical research. After completing this professional master's degree, students may choose to pursue doctoral dissertation research with faculty who are actively involved in collaborations with researchers in biology and medicine.

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 a major option area of study, have the agreement of a major professor or co-director within the department to direct the doctoral research in that area, satisfy the requirements for doctoral candidacy, 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 related to faculty 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 Web site or through the departmental office.

The course requirements are chosen to provide the student with a strong basis for research. Requirements for the MS degree in the student's area of concentration, or their equivalents, are expected to be completed before admission to doctoral candidacy. Standard foundational material that offers breadth is covered in the 5000-level courses; more advanced material that offers depth is covered in topics courses and seminars. Some of these expected courses for the doctoral program may be offered by other departments. The student will be expected to actively participate in at least one of the seminar series offered by the department and to regularly attend the weekly mathematics colloquium. After admission to doctoral candidacy, registration and participation in the appropriate seminar are required for a minimum of three (3) semesters.

A doctoral student in mathematics must demonstrate proficiency in a minor; normally this is accomplished by completing six (6) or more semester hours in an approved mathematics-related subject with a grade point average (GPA) of at least 3.0. The specific requirements for the minor may vary by major option area. If the minor is in mathematics, these hours must be outside the list of courses published for the doctoral preliminary examination in the student's area (and not part of the master's for that 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.

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 admission to doctoral candidacy; if this time limit is not met, the student may be required to repeat the preliminary examination.

Definition of Prefixes

MAA—Mathematics: Analysis

MAD—Mathematics: Discrete

MAP—Mathematics: Applied

MAS—Mathematics: Algebraic Structures

MAT—Mathematics

MHF—Mathematics: History and Foundations

MTG—Mathematics: Topology and Geometry

OCP—Physical Oceanography

Prerequisite Courses

Note: Please refer to the *General Bulletin* for full course descriptions.

MAA 4227	Advanced Calculus II (3)
MAA 4402	Complex Variables (3)
MAC 2312	Calculus with Analytic Geometry II (4)
MAC 2313	Calculus with Analytic Geometry III (5)
MAD 3703	Numerical Analysis I (3)
MAP 2302	Ordinary Differential Equations (3)
MAP 3305	Engineering Mathematics I (3)
MAP 3306	Engineering Mathematics II (3)
MAP 4153	Vector Calculus with Introduction to Tensors (3)
MAP 4170	Introduction to Actuarial Mathematics (4)
MAP 4341	Elementary Partial Differential Equations I (3)
MAP 4342	Elementary Partial Differential Equations II (3)
MAS 3105	Applied Linear Algebra I (4)
MAS 4302	Introduction to Abstract Algebra I (3)
MAS 4303	Introduction to Abstract Algebra II (3)
PHY 2048C	General Physics [for Physical Sciences] (5)
STA 4321	Introduction to Mathematical Statistics (3)

Graduate Courses

Note: Prerequisites are stated by number from the above list of FSU courses. The equivalent course at another institution or consent of the instructor is sufficient.

MAA 5306, 5307. Advanced Calculus I, II (3, 3). Prerequisites: MAC 2313; MAS 3105. 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.

MAA 5932r. Topics in Analysis (1–3). Prerequisite: Permission of instructor. May be repeated to a maximum of twelve (12) semester hours.

MAA 6416r. Advanced Topics in 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 5305. Graph Theory (3). Prerequisite: Graduate standing. Graphs and digraphs, trees and connectivity, Euler and Hamilton tours, colorings, matchings, planarity and Ramsey's theorem, applications. A proof-oriented course that assumes no previous exposure to graph theory but assumes a certain level of mathematical maturity.

MAD 5403. Foundations of Computational Mathematics I (3). Prerequisites: Linear algebra, competence in a programming language suitable for numeric computation. Analysis and implementation of numerical algorithms. Matrix analysis, conditioning, errors, direct and iterative solution of linear systems, rootfinding, systems of nonlinear equations, numerical optimization.

MAD 5404. Foundations of Computational Mathematics II (3). Prerequisite: MAD 5403. Interpolation, quadrature, approximation theory, numerical methods for ordinary differential equations and partial differential equations.

MAD 5420. Numerical Optimization (3). Prerequisites: MAC 2313; MAS 3105; C, C++, or Fortran. Unconstrained minimization: one-dimensional, multivariate, including steepest-descent, Newton's method, Quasi-Newton methods, conjugate-gradient methods, and relevant theoretical convergence theorems. Constrained minimization: Kuhn-Tucker theorems, penalty and barrier methods, duality, and augmented Lagrangian methods. Introduction to global minimization.

MAD 5427. Numerical Optimal Control of Partial Differential Equations (3). Prerequisites: MAD 5739; MAS 3105. Euler Lagrange equations, adjoint method algorithm. Optimal control of systems governed by elliptic, parabolic, hyperbolic PDEs. Control of initial and boundary conditions. Adjoint sensitivity analysis. Optimal parameter estimation, Kalman filter for parameter identification. Automatic differentiation techniques.

MAD 5738, 5739. Numerical Solution of Partial Differential Equations I, II (3, 3). Prerequisites: MAD 5404; 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. Pseudospectral method and aliasing removal. Applications to fluid flow.

MAD 5757. High Order Finite Difference Methods for Computational Acoustics and Fluid Dynamics (3). Prerequisite: MAD 5738. High order spatial and temporal discretization; artificial selective damping; numerical stability; radiation, inflow and outflow boundary conditions; wall and time-domain impedance boundary conditions; nonlinear acoustic waves; design of computation algorithms for direct numerical simulation.

MAD 5932r. Topics in Computational Mathematics (1–3). Prerequisite: Permission of instructor. 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 5107. Mathematical Modeling (3). Prerequisites: MAD 5404; MAP 5431, 5345. Formulation and application of mathematical models for problems arising in the natural sciences, engineering, economics, and industry. Related mathematical topics, including dimensional analysis and scaling, role of dimensionless numbers, perturbation methods, self-similar solutions, traveling waves and solitons, symmetry and symmetry breaking, bifurcations, inverse problems and regularization techniques.

MAP 5165. Methods of Applied Mathematics I (3). Prerequisites: Ordinary differential equations, multi-variable calculus, matrix algebra. Continuous and discrete models from physics, chemistry, biology, and engineering are analyzed using perturbation methods, analytical and geometrical tools and dynamical systems theory.

MAP 5177. Actuarial Models (3). Prerequisites: MAP 4170; STA 4321. Survival models; life probabilities; tables, mortality laws; contingent payment models; life annuities; premium principles and net premium reserves for continuous, discrete and semi-continuous life insurances, multiple life models, multiple decrement theory (theory of competing risks) and applications to pension plans, pricing and nonforfeiture models.

MAP 5178. Advanced Actuarial Models, Credibility, and Simulation (3). Prerequisite: MAP 5177. Topics include claim frequency models, individual loss models, aggregate loss models, multiple-life and multiple-decrement survival models, multiple-state transition models, credibility theory, and simulation.

MAP 5207. Optimization (3). Prerequisites: MAC 2313; MAD 3703; MAS 3105. Linear programming, unconstrained optimization, searching strategies, equality and inequality constrained problems.

- MAP 5217. Calculus of Variations (3).** Prerequisites: MAP 2302; MAA 5306 or MAP 5207. Fundamental problems, weak and strong extrema, necessary and sufficient conditions, Hamilton-Jacobi theory, dynamic programming, control theory, and Pontryagin's maximum principle.
- MAP 5345. Elementary Partial Differential Equations I (3).** Prerequisites: MAC 2313; MAP 2302 or 3305. Separation of variables; Fourier series; Sturm-Liouville problems; multidimensional initial boundary value problems; nonhomogeneous problems; Bessel functions and Legendre polynomials.
- MAP 5346. Elementary Partial Differential Equations II (3).** Prerequisite: MAP 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 5485. Introduction to Mathematical Biophysics (3).** Prerequisites: MAC 2313; MAS 3105. Mathematical tools: symbolic and numerical mathematical software packages, matrix computations, rotation matrices, Euclidean motions, lattices, continuous and discrete curves in space, torsion angles, gram and distance matrices, graphs, string matching algorithms, Fourier series, conformal mapping. Applications such as: protein secondary structure; structure determination by crystallography and NMR; writhing, twisting and knotting of DNA; nucleotide and amino acid sequence alignment; brain mapping.
- MAP 5486. Computational Methods in Biology (3).** Prerequisite: MAP 5485. This course introduces biological topics where mathematical and computational methods are applicable, including discrete and continuous models of biological systems, numerical methods for differential equations, nonlinear differential equations, and stochastic methods.
- MAP 5513. Wave Propagation Theory (3).** Prerequisites: MAP 4342 or 5346; MAP 5431. Phase and group velocities, dispersion, reflection, characteristics, shock formation, momentum and energy transport, and nonlinear effects. Applications such as acoustics, water waves, internal waves, Rossby waves, and seismic waves. The Korteweg-DeVries equation and solutions.
- MAP 5601. Introduction to Financial Mathematics (3).** Prerequisites: MAC 2313; MAP 2302, 3305 or 3306; MAS 3105; STA 4321. Partial differential equations, Brownian motion, Black-Scholes analysis, introduction to measure and probability; financial applications.
- MAP 5611. Introduction to Computational Finance (3).** Prerequisites: MAP5601; C, C++ or appropriate computer language. Computational methods for solving mathematical problems in finance: basic numerical methods, numerical solution of parabolic partial differential equations, including convergence and stability, solution of the Black-Scholes equation, boundary conditions for American options and binomial and random walk methods.
- MAP 5932r. Topics in Applied Mathematics (1-3).** Prerequisite: Permission of instructor. 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 6621. Financial Engineering I (3).** Prerequisites: FIN 5515, MAP 5601, 5611 (Recommended: STA 5807). This course is a quantitative treatment of core problems in the investment industry. Topics include an analysis of active portfolio management including risk factor models and mean-variance optimization, the Martingale approach to derivative pricing for both discrete and continuous models, applied stochastic calculus, and stochastic interest rate models.
- MAP 6939r. Advanced Seminar in Applied Mathematics (1).** (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.
- 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.
- MAS 5932r. Topics in Algebra (1-3).** Prerequisite: Permission of instructor. May be repeated to a maximum of twelve (12) semester hours.
- MAS 6396r. Advanced Topics in Algebra I. (3).** 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 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 Advanced Topics (1-3).** Prerequisite: Permission of instructor. 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 5939r. Graduate Seminar (1).** (S/U grade only.) Prerequisite: Permission of instructor. 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.
- MAT 6908r. Directed Individual Study (1-4).** (S/U grade only.) May be repeated to a maximum of twelve (12) semester hours.
- MAT 6932r. Advanced Topics in Mathematics (1-3).** May be repeated to a maximum of twelve (12) semester hours.
- MAT 6933r. Selected Advanced Topics (1-3).** (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.)
- MAT 8964. Doctoral Preliminary Examination (0).** (P/F grade only.)
- MAT 8966. Masters Comprehensive Examination (0).** (P/F grade only.)
- MAT 8976. Masters Thesis Defense (0).** (P/F grade only.)
- MAT 8985r. Defense of Dissertation (0).** (P/F grade only.)
- MHF 5206. Foundations of Mathematics (3).** Zermelo-Fraenkel axioms for set theory. Finite and infinite sets. Ordinal numbers, cardinal numbers. The axiom of choice and some of its equivalents.
- MHF 5306. Mathematical Logic I (3).** Prerequisite: MAS 4302. Propositional and predicate logic, models. Godels completeness theorem and related theorems. Applications to modern algebra. Non-standard analysis.
- 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.
- MTG 5932r. Topics in Geometry (1-3).** Prerequisite: Permission of instructor. May be repeated to a maximum of twelve (12) semester hours.
- 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.
- OCP 5256. 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.

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; **Professors:** Chandra, Chen, Collins, Gielisse, Krothapalli, Lourenco, Schwartz, Shih, Van Dommelen, Van Sciver; **Associate Professors:** Alvi, El-Azab, Hollis, Hruda, Kalu, Luongo; **Assistant Professors:** Cartes, Foreman; **Visiting Assistant Professors:** Moore, Ordonez; **Affiliated Faculty:** Buzyna, Garmestani, Haik, Han, Hussaini, Tam; **Adjunct Faculty:** Bickley, Boeshagh, Moore, Vaghar

The Department of Mechanical Engineering offers two graduate degree programs: the master of science (MS) and the doctor of philosophy (PhD). The graduate program in mechanical engineering is designed to provide students with the necessary tools to begin a productive career in engineering practice or research, a career that probably will span a period of three to five decades. Although it is not possible to teach everything that one needs to know in the graduate program, the program provides the student with the skills, knowledge and philosophy that will enable the student to continue to grow throughout his/her career. The graduate training a student receives emphasizes a fundamental approach to engineering whereby the student learns to identify needs, define problems and apply basic principles and techniques to obtain a solution. This philosophy is incorporated in classroom lectures, laboratory activities, design projects, and research.

It is essential that a successful department cultivate and maintain a diverse and dynamic program that is nationally recognized. The department is actively involved in basic research, which expands the frontiers of knowledge, as well as applied research designed to solve present and future technological needs of society. The major research activities are focused in three primary areas: fluid mechanics and heat transfer, solid mechanics and material science, and dynamic systems and controls (including mechatronics and robotics). State-of-the-art laboratories are associated with each of these areas. In addition, much of the research is conducted in cooperation with the National High Field Magnetic Laboratory (NHMFL), the School of Computational Science (SCS), the Center for Material Research and Technology (MARTECH), and the Center for Nonlinear and Non-equilibrium Aero Science.

A complete description of the mechanical engineering graduate program, including recent changes, may be found at <http://www.eng.fsu.edu/>

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 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, which pose particular numerical simulation challenges. The computational program is supported by the School of Computational Science (SCS) at Florida State University, which operates an 168 node IBM SP-3 with 84 gigabytes of memory, as well as a heterogeneous compute cluster and several mid-range computers.

The **Cryogenics Laboratory** is a fully equipped facility for the conducting of low-temperature experimental research and development. The laboratory, which occupies approximately 400 m² at the National High Magnetic Field Laboratory (adjacent to the College of Engineering), supports research and development projects in a wide variety of technical fields. Numerous experimental apparatus are available within the Cryogenics Laboratory for research projects. *The Liquid Helium Flow Facility (LHFF)* consists of a 5 m long, 20 cm ID horizontal cryogenic vessel with vertical reservoirs at each end containing circulation pumps and other hardware. The facility includes transverse viewing ports for flow visualization studies. *The Cryogenic Helium Experimental Facility (CHEF)* consisting of a 3 m long, 0.6 m ID cryogenic vessel with N₂ and He temperature thermal shields. CHEF is equipped with a high-volume flow bellows pump capable of up to 5 liters/s. *The Cryogenic Particle Image Velocimetry (PIV) Facility* including apparatus to perform micro-scale imaging studies of flow fields in cryogenic fluids. A cryogenic vessel with optical windows, dual head pulse Nd:YAG laser and image processing equipment are included in the facility. Currently, this facility is being used to develop neutral density particles, including solid H₂/D₂, and observe flow fields in liquid helium. A *cryogenic transport property measuring facility* that includes a two stage GM Cryocooler with compressor that can achieve T_{min} = 10 K and provide 30 W at 20 K and 60 W at about 70 K. All cryogenics facilities are supported by a full complement of cryogenic hardware to measure flow rate, void fraction, liquid level, temperature and pressure. Microcomputer data acquisition is available for interfacing to all experiments. The electronics available in the laboratory that may be accessed through this system include a full complement of amplifiers, signal conditioning equipment and data recorders. The laboratory contains all necessary equipment to perform modern cryogenic experiments. High vacuum equipment including a mass spectrometer leak detector and two portable turbo pump systems provides thermal isolation. A high-capacity vacuum pump (500 liter/s) is used to support subatmospheric experiments including those with superfluid helium.

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 micro-image processing.

Research in the **Materials Testing and Characterization Laboratory** is focused on the investigation of processing-structure-property relationships in advanced materials. Materials of interest include but are not limited to high temperature materials (titanium aluminides and their composites), 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 course work 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 Web site.

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] semester 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 course work 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 Sciences

EGR—Engineering: General

EMA—Materials Engineering

EML—Engineering: Mechanical

Graduate Courses

EGM 5444. Advanced Dynamics (3). Prerequisites: EGN 3321; EML 3220; MAP 3306. Topics include particle and rigid body kinematics, particle and rigid body kinetics, D'Alembert Principle, Lagrange's equations of motion, system stability, computational techniques, orbital dynamics, multi-body dynamics.

EGM 5611. Introduction to Continuum Mechanics (3). Prerequisite: Graduate standing. Solid and fluid continua. Cartesian tensor theory. Kinematics of infinitesimal deformation, relations between stress, strain, and strain rate for elastic, plastic, and viscous solids and for compressible and viscous fluids. General equations of continuum mechanics, integral forms, and their physical interpretation. Particular forms of equations and boundary conditions for elastic and viscoelastic solids and Newtonian fluids.

EGM 5653. Theory of Elasticity (3). Prerequisite: EGM 5611. This is an introductory course which provides background necessary to mechanical engineers who wish to pursue the area of theoretical or analytical solid mechanics. Topics include Cartesian tensors, kinetics and kinematics of motion, constitutive equations, linearized theory of elasticity, and solutions to boundary value problems.

EGM 5810. Viscous Fluid Flows (3). Prerequisite: EML 5709. Presents the basic fundamentals underlying the mechanics of gas, air, and fluid flows. Discussion of the possible methods of estimating and predicting the characteristics and parameters governing those flows.

EGM 6845. Turbulent Flows (3). Prerequisite: EML 5709. In-depth study of turbulent, flows, statistical description of turbulence; instability and transition; turbulence closure modeling; free shear and boundary layer flows; complex shear flows; development of computational strategies; recent literature on applications and chaos phenomena.

EGR 5456. Introduction to Computational Mechanics (3). Prerequisite: MAP 4402. Familiarizes students with the procedures, stability, advantages, and disadvantages of numerical discretization, as applied to solution of common engineering problems. Emphasizes numerical experimentation, cost effectiveness, and range of applicability.

EMA 5226. Mechanical Metallurgy (3). Prerequisites: EGM 3520; EML 3234. Tensile instability, crystallography, theory of dislocations, plasticity, hardening mechanisms, creep and fracture, electron microscopy, composite materials.

EMA 5514. Optical and Electron Microscopy (3). Prerequisite: EML 3012C or 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 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 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 5946r. Professional Internship Experience in Mechanical Engineering (4). This course provides practical experience through working as an intern at selected industry or research laboratories supervised by the on-the-job mentors and by the Department of Mechanical Engineering. The course is designed to provide the student with professional internship experience in preparation for his/her future career development.

EML 5971r. Thesis (3-6). (S/U grade only.) A minimum of six (6) semester hours is required.

EML 6365. Robust Control (3). Prerequisite: EML 5361. Course covers control design for systems with uncertain dynamics; robust H design, structured singular value synthesis; LMI and Riccati equation solution techniques.

EML 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 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). (P/F grade only.) May be repeated twice.
EML 8968. Preliminary Doctoral Examination (0). (P/F grade only.)
EML 8976r. Master's Thesis Defense (0). (P/F grade only.)
EML 8985r. Dissertation Defense (0). (P/F grade only.) May be repeated to a maximum of three (3) times.

MEDICINE

COLLEGE OF MEDICINE

Department of Clinical Sciences: Chair, Eugene Ryerson; **Professors:** Berg, Bertolette, Bland, Bradley, Harris, Hartsfield, Muszynski, Ryerson, Trowers; **Associate Professors:** K. Lee, Shepherd; **Assistant Professor:** Danforth; **Department of Family Medicine and Rural Health:** Chair, Daniel Van Durme; **Professors:** Beitsch, Brooks, Dunn, Littles, McLeod, Steele, Stine, Van Durme; **Associate Professors:** Baker, Campbell; **Assistant Professors:** Blackburn, Chukmaitov, Goodwin, Harrison, Quintero, Rodriquez, Saunders; **Associates in Medicine:** Clark, Clawson, Menachemi; **Department of Geriatrics:** Chair, Kenneth Brummel-Smith; **Professors:** Brummel-Smith, Granville, Lloyd; **Associate Professors:** Kobylarz, Pomidor; **Department of Medical Humanities and Social Sciences:** Chair, Suzanne Johnson; **Professors:** Eveland, Glueckauf, Johnson, Rost; **Associate Professor:** Spike; **Assistant Professors:** Dutton, Gerend, Reyes; **Assistant Scholar Scientist:** Baughcum

For a complete listing of part-time clinical faculty, please visit the FSU College of Medicine Web site at <http://www.med.fsu.edu/Directory/default.aspx> and click *Clerkship Faculty*.

Doctor of Medicine (MD) Degree

Florida State University provides a four-year program of study leading to the medical doctor (MD) degree. The College trains students in allopathic medicine, which includes diagnosing, managing, and treating disease. Upon completion of the four-year MD educational program, physicians pursue graduate medical education (internship, residency and sometimes fellowships). Training in residency programs may take from three to nine additional years after completion of medical school. The medical school curriculum provides a generalist education and focuses on practice in ambulatory settings, specifically, to serve currently underserved populations, i.e., rural, inner city, minority, and geriatric patients in the state of Florida.

Honors Medical Scholars Program

The FSU College of Medicine joined forces with the FSU Honors Office to establish a BS/MD program that is open to up to five students annually. The program allows eligible FSU honors students to pursue a BS degree of their choice while also participating in the Medical Scholars Program, which includes a seminar, mentorship program, and required pre-medical courses and experiences. Students participating in the program are eligible for early admission into the FSU College of Medicine upon completion of pre-med requirements, making it possible to graduate with BS and MD degrees in seven years. Applications and program details are available from the FSU Honors Office, (850) 644-1841.

PhD in Biomedical Sciences

The PhD program in Biomedical Sciences is designed to prepare the next generation of health scientists for medical research and teaching in an era of increasing coordination and integration of traditional disciplines. Undergraduate majors in biology, biochemistry, chemistry, microbiology, or other life sciences are suitable for graduate studies in biomedical sciences. Research rotations during the first year allow students to make an informed choice regarding the research area and major professor with whom they will conduct their PhD work. A core curriculum of the fundamentals, the choice of electives from other departments, and intellectual interaction with faculty and postdoctoral fellows encourage graduate students to mature into independent scientists. Graduates of the PhD in Biomedical Sciences will be prepared to join the scientific

workforce trained for careers in an interdisciplinary environment. Full information and course offerings within this program are available in the "Biomedical Sciences" chapter of this *Graduate Bulletin*.

For complete details on degree requirements, plus a description of the College, its facilities, opportunities and available financial assistance, refer to the "College of Medicine" chapter of this *Graduate Bulletin*.

Definition of Prefixes

BCC—Basic Clinical Clerkship
BMS—Basic Medical Sciences
GMS—Graduate Medical Sciences
IHS—Interdisciplinary Health Sciences
MEL—Medical Science Electives

Graduate Courses

BCC 7112. Internal Medicine (8). This clerkship is designed to allow students to participate in the management of patients with common clinical presentations encountered in the general practice of internal medicine.

BCC 7113. Advanced Internal Medicine Clerkship (4). Prerequisites: Completion of 3rd year of medical school, including completion of M3 IM Clerkship. This clerkship allows students the opportunity to participate in the management of patients with common clinical presentations encountered in the practice of hospital-based internal medicine. Each student has the opportunity to experience a broad range of illness severity ranging from acute care upon presentation to the emergency department to life-threatening processes in the intensive care unit. Students also have the opportunity to improve their basic clinical skills, learn new inpatient procedures and examination techniques, and assess the effectiveness of their clinical interventions.

BCC 7130. Obstetrics/Gynecology Clerkship (6). This clinical clerkship is designed to acquaint the student with the varied aspects of medical care for women, with emphasis on acquiring the basic skills of gynecologic and obstetrical history-taking and physical examination, participating and assuming responsibility in the evaluation and care of outpatients and inpatients, and acquiring practical experience in the operating and delivery room areas.

BCC 7140. Pediatrics Clerkship (6). Prerequisite: Satisfactory completion of all year-one and year-two curricula. This pediatrics clerkship is a six-week learning experience with an emphasis on ambulatory pediatrics. Students learn under the supervision of clerkship faculty trained to teach in the clinical setting. Students interact with pediatric patients who present a variety of common pediatric diseases/conditions.

BCC 7150. Psychiatry Clerkship (6). Prerequisites: Satisfactory completion of all year-one and year-two curricula. Students learn pathophysiology, diagnosis, and management of common problems in mental health and psychiatry in hospital and out-patient settings.

BCC 7160. Surgery Clerkship (8). Prerequisites: Satisfactory completion of all year-one and year-two curricula. Students learn pathophysiology, diagnosis, and management of common problems in general surgery, otolaryngology, orthopedics, OB/GYN, urology, and neurosurgery in hospital and out-patient settings.

BCC 7170. Community Medicine (3). Prerequisites: Satisfactory completion of all year-one and year-two curricula. This three-week course in year three is designed to broaden students' understanding of the role played by community agencies in health promotion and disease prevention. Students are assigned to a community health agency under the supervision of a preceptor. Students work as a team to assist the agency in fulfilling its goals.

BCC 7174. Primary Care Geriatrics (4). Prerequisite: Satisfactory completion of all 1st, 2nd, and 3rd year courses. This required 4th year clerkship provides varied primary care experiences with older adult patients. The major goal is to provide an in-depth exposure of the medical student to the intricacies, subtleties, barriers and obstacles to be overcome in providing quality primary care to older patients in the settings where that care most frequently occurs. Emphasis is placed on the physician's role in maintaining, restoring and rehabilitating the older adult patient to achieve the most independent function possible. Consistent with a "school without walls" concept, students follow assigned patients in an effort to explore how continuous and coordinated geriatric care might be provided. Competency in the identification, evaluation and treatment of common geriatric problems and syndromes is pursued.

BCC 7175. Clerkship in Family Medicine (6). This community-based, ambulatory clerkship emphasizes the identification, evaluation and treatment of family practice patients with common medical, surgical and psychological conditions. Students in this course spend eight patient care sessions/week under supervision of the family physician in the office; complete two required clerkship projects; and utilize Web-based self-directed learning activities.

BCC 7176. Advanced Family Medicine Clerkship (4). Prerequisite: Completion of all required third-year clerkships. The goal of the Advanced Family Medicine Clerkship (AFMC) is to expose students to an intense clinical experience in a family medicine setting. Consistent with the college's mission to train physicians to care for patients located in rural areas and patients who are medically underserved, the clerkship takes place in settings that expose students to these patient populations. Students select one of two available options for the AFMC—a rural site or a family medicine residency program in Florida.

BCC 7180. Emergency Medicine (4). Prerequisite: Satisfactory completion of three years of medical school. Students engage in appropriately directed patient history and physical exams, physical diagnoses, medical decision making, acquisition of procedural skills, and exposure to a broad base of undifferentiated patients with a wide variety of personal, social, and cultural issues that influence patient care. This environment places a premium on physical exam skills, diagnostic reasoning, recognition of life-threatening situations, and initiation of resuscitation in a wide range of diseases with varying degrees of urgency. Students are taught to appreciate the dynamic state of emergency medicine knowledge, the necessity for maintaining currency, and the means to do it.

BCC 7182. Doctoring 3 (6). (S/U grade only.) Prerequisites: Satisfactory completion of all year-one and year-two curricula. The purpose of this course is to enhance students' clinical knowledge and skills and provide them opportunities to explore issues that extend across all medical disciplines.

BMS 6015. Doctoring 101 (3). This course is an introduction to the biopsychosocial model of health and illness and the application of the behavioral sciences to understanding and treating patients. Students learn the principles of the patient-centered clinical method and approaches to analyzing ethical issues in patient care.

BMS 6016. Doctoring 102 (5). This course is a continuation of the first-year doctoring course. It emphasizes normal biobehavioral development across the life-span.

BMS 6017. Doctoring 103 (5). 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 are introduced to anatomical terminology commonly used in medicine today, which, in conjunction with the acquired anatomical knowledge base is reinforced in the integrated format of the full four-year curriculum.

BMS 6204. Medical Biochemistry and Genetics (5). 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 infections 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 (2). 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 autonomic, 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 (6). 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 pathology and immunology.

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 (9). 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 (6). The study of clinical neuroscience includes neurophysiology, neuroendocrinology and functional neuroanatomy. This course lays the foundation for future work in neurology and enables students to understand neural function and the nature of neurological disorders.

BMS 6821. Medicine and Behavior I (2). This course covers the essentials of behavior science, including psychological theories, development over the lifespan and social behavior. The application of behavioral science to health, illness and patient management is reviewed.

BMS 6822. Medicine and Behavior II (2). Prerequisite: BMS 6821. This course covers the application of social and behavioral science principles to the care of patients with a variety of medical and psychiatric disorders. Ethical dilemmas in patient care are also explored.

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 6824r. Cross-Cultural Medicine (2). (S/U grade only.) This course exposes students to delivery of primary care in a cross-cultural and cross-language setting. This is a cultural immersion experience in which students work and live together in the community they serve. The clinical work takes place during spring break. Students are expected to participate in the planning and organization of the experience prior to the clinical week. May be repeated to a maximum of four (4) semester hours.

BMS 6831. Doctoring 201 (4). 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 (8). 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.

GMS 5905r. Directed Individual Study (1-3). (S/U grade only.) Prerequisite: Consent of instructor. Study on a selected topic as designated by the student or directing professor. May be repeated to a maximum of nine (9) semester hours.

IHS 5905r. Directed Individual Study in Health Sciences (1-12). (S/U grade only.) This is a course for graduate students who desire an individualized research experience in Biomedical Sciences, Medical Humanities and Social Sciences, Public Health or other fields represented in the College of Medicine. Students receive laboratory or other training in research methods and improve their readiness for and appreciation of research in health-related science. May be repeated to a maximum of thirty-six (36) semester hours.

IHS 5906r. Directed Individual Study in Medical Sciences (1-12). (S/U grade only.) This is a course for medical students who desire an individualized research experience in Biomedical Sciences, Medical Humanities and Social Sciences, Public Health or other fields represented in the College of Medicine. Students receive laboratory or other training in research methods and improve their readiness for and appreciation of independent research in health-related science. May be repeated to a maximum of twenty-four (24) semester hours.

MEL 6117. Medical Spanish I (2). (S/U grade only.) This course includes formal class lectures, group discussion, roleplaying, and Web-based exercises. The class primarily addresses the needs of medical students with little or no experience with Spanish. Students receive instruction in the essentials of Spanish grammar and expand their knowledge of Spanish vocabulary with an emphasis on medical terminology. Students are also exposed to pertinent information about Hispanic cultures, particularly those dimensions that may impact the quality of provider-patient communication.

MEL 6119. Medical Spanish II (2). (S/U grade only.) Prerequisite: MEL 6117. Special emphasis in this course is placed on in-class activities such as interviewing, history taking, and roleplaying of brief patient encounters in medical settings. Students have multiple opportunities to practice their Spanish with native speakers.

Fourth Year Electives

In the fourth year of study, the program offers a wide variety of electives to help students develop skills in their specific areas of study and practice. Electives are available in the fields of family medicine, geriatrics, internal medicine, obstetrics/gynecology, pediatrics, psychiatry, surgery and others. For a complete and current list of fourth-year electives, please visit our Web site at <http://www.med.fsu.edu/education/Curriculum/>.

Department of METEOROLOGY

COLLEGE OF ARTS AND SCIENCES

Chair: Robert G. Ellingson; **Associate Chair:** *Ruscher; **Professors:** Ellingson, Fuelberg, *T. Krishnamurti, Nicholson, +*O'Brien, Ray, *Zou; **Associate Professors:** Ahlquist, *Cai, *Clayson, Liu, *Ruscher; **Assistant Professors:** *Bourassa, *Cunningham, Hart, *Reasor; **Professors Emeriti:** Barcion, Gleeson, LaSeur, Long, Pfeffer, Staley

* 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, boundary layer meteorology, climate prediction, data assimilation, design of meteorological networks, large-scale flow, meso-meteorology, numerical weather prediction, ocean upwelling, physical climatology, radar meteorology, radiation physics, remote sensing, satellite meteorology, statistical prediction, tropical circulations, turbulence, and vortex dynamics.

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 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 Florida State University as well as being named the 1999–2000 Robert O. Lawton Distinguished Professor. Four 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 (SCS). Scientific computations are handled by workstations and microcomputers within the department, including SUN, Silicon Graphics, IBM, Apple and IBM PCs, and PC clones. An advanced meteorological computing laboratory is available to graduate students in the department. Florida State University also has state-of-the-art supercomputing facilities on campus, accessible by both faculty and students.

GOES and NOAA polar-orbiter satellite images are ingested by our direct readout groundstations and are available in real-time at various locations in the meteorology building and on our Web site, <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 initiatives 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 attached to the meteorology/mathematics building, which further strengthens the department's ties to the operational 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 should have completed mathematics through partial differential equations (MAP 4341 or equivalent), have had a course in FORTRAN programming (CGS 3460 or equivalent), and have had at least one year of physics with calculus. Satisfactory completion of these general requirements is expected to precede graduate level work. A score of at least 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; three letters of recommendation are required.

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—Physical Oceanography

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 (Eady 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.

MET5406. Satellite Observations and Their Applications in Numerical Weather Prediction (3). Prerequisites: MAP 3305 or equivalent computer programming. This course covers techniques, research, and operational applications related to satellite observations and their applications in numerical weather prediction. Students gain hands-on experience and a comprehensive understanding of data assimilation and related application problems in atmospheric science.

MET 5541r. Dynamical Weather Prediction (3). Prerequisite: MET 4301 or 5311. Prediction of atmospheric and oceanic flow patterns by numerical methods; numerical solution of partial differential equation; modeling. May be repeated to a maximum of six (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 5256. 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 5407. Fundamentals of Atmospheric Data Assimilation (3). Prerequisites: MAP 3305 or equivalent computer programming. This course provides the fundamentals of objective analysis and data assimilation with an emphasis on the physical aspects of objective analysis. Students learn how the general mathematical concepts and methods are applied to solve many practical data analysis and assimilation problems in atmospheric science.

MET 5411. Radar Meteorology (3). Prerequisite: MET 4450 or 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 electrification.

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 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 5090r. Applied Time Series Analysis (3). Prerequisites: CGS 3460; MAP 3306; STA 2122. This course analyzes real and complex-valued meteorological and/or oceanographic time series in the frequency and time domains by writing computer programs.

MET 5403C. Meteorological Instruments and Observations (3). Prerequisites: MET 2700; PHY 2048C. Course covers the theory and practice of calibration and operation of basic sensors measurement of temperature, heat flow, fluid flow, pressure and moisture.

MET 5905r. Directed Individual Study (1-3). (S/U grade only.) May be repeated to a maximum of twenty-four (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 toward 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). (P/F grade only.)

MET 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

MET 8976r. Master's Thesis Defense (0). (P/F grade only.)

MET 8985r. Dissertation Defense (0). (P/F grade only.)

OCF 5271. Turbulence (3). Prerequisite: MET 4301, MET 5311, or OCF 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.

OCF 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 5836C. 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: Pamela Carroll

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; **Associate Professor:** Wood; **Visiting Assistant**

Professor: Steadman; **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. The master's degree also allows for an emphasis in 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 and throughout the University toward the development of the graduate program. Master's, specialist, and doctoral advisory committees typically include professors from the Department of Middle and Secondary Education and the English Department.

English education faculty members are researchers as well as teacher educators and have made significant contributions to the theory and

practice of English teaching, with particular attention to the teaching of literature, reading, written composition, whole language theory and practice, technology for English classrooms, and young adult literature.

Graduates of the English education program are candidates for positions as college professors and instructors, junior college instructors, secondary teachers, researchers, curriculum planners, supervisors, writers and editors, and consultants. For more information, see <http://www.fsu.edu/~mse/Programs/English/index.html>.

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. Decisions regarding the appropriate choice of courses will be determined in part by the graduate student's undergraduate course work and work experiences, as well as his or her goals. Experienced teachers may choose the track that emphasizes work toward National Board Certification. A student who is an experienced teacher may elect to write a thesis in lieu of three to six (3–6) hours of course work. All candidates take a comprehensive examination and/or complete an electronic portfolio 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, 2) a score of 1000 on the combined aptitude portions of the Graduate Record Examinations (GRE); 3) submission of an acceptable sample of academic writing, and 4) completion of a minimum of twenty-one (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. Applicants must submit a sample of academic writing, (3 letters of recommendation, a letter of intent, an FSU application, and copies of all official transcripts) to Dr. P. S. Carroll, English Education, 209 MCH, FSU, Tallahassee, FL 32306-4490.

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 who enter the graduate program without teacher certification will be placed in the master's degree/teacher certification track. These students will be required to take the Florida Teacher Certification Exam (3 sections) while completing the program and will be required to complete a student teaching internship at a local middle or high school in their final semester of course work.

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, educational research, and correlated fields. Program details will be decided upon by candidates in consultation with their supervisory committee. All candidates must pass a comprehensive examination at the completion of 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, as will an acceptable sample of academic writing.

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 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 Prefix

LAE—Language Arts and English Education

Graduate Courses

LAE 5064. Reader Response to Literature: Research and Practice (3). Concepts of nature of literature, relevant developments in literary studies, theory and criticism, strategies of promoting student response to literary works.

LAE 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).** (P/F grade only.)
- LAE 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- LAE 8968r. Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- LAE 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- LAE 8978r. Specialist in Education Thesis Defense (0).** (P/F grade only.)
- LAE 8985r. Dissertation Defense (0).** (P/F grade only.)

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. For more information, see <http://www.fsu.edu/~mse/Programs/Health/index.html>.

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 (teacher 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 average 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 adviser. (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

- 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 for publication. Specialized areas courses are selected in consultation with an adviser considering the student's 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 adviser 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 Prefix

HSC—Health Sciences

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). (P/F grade only.)

MATHEMATICS EDUCATION

Associate Professors: Aspinwall, Jakubowski, Shaw; **Assistant Professor:** Fernandez; Clark; **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 is also heavily involved in curriculum development and teacher enhancement projects. For more information, see <http://www.fsu.edu/~mse/programs/math/index.html>.

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 than 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 adviser 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 student. 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 satisfy mathematics requirements in addition to the mathematics education requirements. Students seeking initial teacher certification may have additional requirements necessary for certification.

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 than 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 adviser 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 student’s 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 a community college, college, or university. Additional information is provided in a PhD handbook available from program faculty.

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, 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 is reviewed and approved by the student’s supervisory committee. 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 degree in mathematics, or at least eighteen (18) semester hours in mathematics at the graduate level, has not been obtained, then graduate mathematics courses are taken to augment those previously completed. Course work in analysis, algebra, geometry, applications, topology, number theory and statistics 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 purpose of this examination is to determine that satisfactory progress is being made and that the student is well suited for doctoral study in mathematics education at Florida State University. As part of this process, an advisory committee is established, a major professor is determined, and a program of study is planned.

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 successfully 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 2 weeks 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 after a candidate has been accepted as a doctoral candidate. Formal College of Education and University 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 8985r, 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 5175. Teaching Community College Mathematics (3). Prerequisites: graduate standing; MAC 2313; or permission of instructor. This course provides a foundation in the teaching and learning of community college mathematics courses including introductory mathematics, introductory algebra, college algebra, trigonometry, calculus, and statistics. Topics include investigations into the conceptual nature of mathematics and applications in the community college mathematics curriculum.

MAE 5337. Seminar on the Teaching of Algebra (2).

MAE 5338. Seminar on the Teaching of Geometry (2).

MAE 5641r. Special Topics in Mathematics Education (2–3). 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 instructor's 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 instructor. 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). (P/F grade only.)

MAE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

MAE 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

MAE 8976r. Master's Thesis Defense (0). (P/F grade only.)

MAE 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

MAE 8985r. Dissertation Defense (0). (P/F grade only.)

MULTILINGUAL/MULTICULTURAL EDUCATION

Professor: Jenks; **Assistant Professor:** Hasson; **Courtesy Professors:** Kennell, Lupo-Anderson

Multilingual/Multicultural Education (MMEd) is one of six programs in the Department of Middle and Secondary Education at 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). For more information, see <http://www.fsu.edu/~mse/Programs/Multi/index.html>.

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. Course work includes a total of sixteen (16) semester hours in TSL course work, as determined by the MMED faculty.

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 course work 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 a minimum of thirty-three (33) semester hours in TSL course work. 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 course work are supervised by a committee representing the MMed faculty, the College of Education, and the University, with one MMed faculty member serving as the adviser. 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 course work is dependent on evaluation of previous graduate work.

TESOL Specialization

Core requirements include TSL 5005, 5142, 5250, 5527, 5471, 5595, 5640, 5775, 5795, 5930r, 6640, and LIN 5706.

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 course work 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 course work 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

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 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 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 6980r. Dissertation (1–12). (S/U grade only.)

FLE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

FLE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

FLE 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

FLE 8976r. Master's Thesis Defense (0). (P/F grade only.)

FLE 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

FLE 8985r. Dissertation Defense (0). (P/F grade only.)

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 5142. Development of Curriculum and Materials in Foreign Languages (3). Prerequisite: TSL 5005. 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.

TSL 5250. 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.

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 5377. Reading in Foreign Language Instruction (3). Against a backdrop of current theories, issues, and research in first and second language reading, students select from a range of reading approaches to develop reading units and activities for specific kinds of learners, including those with low literacy and L2 proficiency.

TSL5471. Testing and Evaluation in Foreign Languages (3). Prerequisite: TSL 5005. 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.

TSL 5527. 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.

TSL 5640. Seminar: Research in Second Language Learning and Teaching (3). This course is a comprehensive overview of second language learning and learners. Additionally, students examine the major theories and concepts associated with second language acquisition in naturalistic, classroom, and laboratory settings.

TSL 5908r. Directed Individualized Study (1-3). (S/U grade only.) May be repeated to a maximum of twelve (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.

TSL 5931r. Seminar: Special Topics in Applied Linguistics (2-3). This course addresses any topic relevant to the broader field of multilingual/multicultural education and may be repeated to a maximum of twelve (12) semester hours.

TSL 5940r. Field Laboratory Internship (1-8). (S/U grade only.) May be repeated to a maximum of eight (8) semester hours.

TSL 6641. Research Issues and Designs in Second Language Education (3). This course provides doctoral students with opportunities to become familiar with major issues in research in the field, to develop skills in the critical reading of research in several areas (L2 learning, teaching, policy, assessment, curriculum) and to begin extensive reading in their own areas of interest.

SCIENCE EDUCATION

Associate Professors: Davis, Gallard, Southerland; **Professor Emeritus:** Dawson

<http://www.fsu.edu/~mse/Programs/Science/index.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 Florida State University's laboratory school.

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, eighteen (18) semester hours minimum; dissertation in science education, twenty-four (24) semester hours minimum; research method, twelve (12) semester hours minimum; educational foundations, twelve (12) semester hours minimum; science content, variable; electives nine (9) semester hours minimum.

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 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 collecting data for the dissertation, candidates must successfully defend their written prospectus to their supervisory committee. When the dissertation is completed, the candidate defends it in an oral examination conducted by the supervisory committee. Students actively writing their dissertation must enroll for a minimum of three (3) semester hours of dissertation credit each semester they are writing.

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. The courses in science education include courses in teaching and learning, curriculum and research, and must be completed, along with course mandated by the legislature, and an appropriate supervised teaching internship and teaching practicum. The specific courses should be selected on the basis of the recommendations of science education faculty. The courses which count for certification can be graduate and/or undergraduate courses from Florida State University or elsewhere. As the rules for certification are determined by the legislature and the Florida Department of Education they are subject to change. 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 5225. Conceptual Learning in Middle School Science (3).** Provides opportunities to acquire knowledge and skills related to teaching and learning science in middle school grades. Investigates the emotional and psychological needs of adolescent pupils in relationship to the middle school science curriculum.
- SCE 5340. Teaching and Learning Science (3).** Master's level. Provides opportunities for students to examine predominant psychological models of human cognition, the evolving nature of science knowledge, and the role of the teacher in assisting students to learn science with understanding.
- SCE 5545. Teaching Science in Diverse Classrooms (3).** This course examines the implications of "science for all," with a particular emphasis on the interactions of students' culture and culture of science. This examination is followed by a description of instructional congruence and its role in helping all students move toward scientific literacy. This course culminates with the identification of practices that allow for cultural congruence and the application of these practices in the design and enactment of an instructionally congruent unit of science teaching.
- SCE 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 5836C. Teaching Earth and Space Science (3).** Includes traditional discipline categories of geology, meteorology, astronomy, and oceanography. Utilizes National Science Education standards to organize subject matter, which is the focus of this pedagogical course.
- SCE 5895. Nature of Science and Science Teaching (3).** This course allows students to examine the nature of scientific knowledge and how the particular actions involved in scientific inquiry influence the characteristics of knowledge it produces. The course also examines the role of the nature of science knowledge in a broader scientific literacy with an explanation of how to support students in constructing that knowledge.
- SCE 5905r. Directed Individual Study (1–3).** (S/U grade only.) May be repeated to a maximum of twelve (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 5935r. Special Problems in the Teaching of Secondary School Science (1–3).** May be repeated to a maximum of nine (9) 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 6345r. Teaching and Learning Science (3).** To enable graduate students to develop an understanding of psychological models and how they apply to teaching and learning of school science.
- SCE 6351. Curriculum Design in Science (3).** Provides opportunities to learn and apply the principles of curriculum design, implementation, and evaluation in science. The course emphasizes analysis of implemented science curricula in terms of philosophical and psychological models, the roles of teachers and students and external forces.
- SCE 6395. Science Teacher Education (3).** Investigates sources of teacher knowledge and explores strategies for improving science teacher performance. Common approaches to staff development are studied and analyzed and innovative approaches are developed and evaluated in terms of theory and research on teaching.
- SCE 6761r. Research, Recent Developments, and Current Issues in Science Education (3–5).** May be repeated to a maximum of ten (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).** (P/F grade only.)
- SCE 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- SCE 8968r. Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- SCE 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- SCE 8978r. Specialist in Education Thesis Defense (0).** (P/F grade only.)
- SCE 8985r. Dissertation Defense (0).** (P/F grade only.)

SOCIAL SCIENCE EDUCATION

Assistant Professors: Brown, Martin; **Professor Emeritus:** Lunstrum

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 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
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 course work. 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 assistance of a major professor.

For successful completion of the degree, students must have a minimum 3.0 GPA and perform satisfactorily on the thesis defense 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 résumé and copies of any articles, reports, or materials they may have authored which are relevant to their application. In assessing eligibility for admission, the admissions committee takes into account these factors, as well as previous experiences.

Definition of Prefixes

EDF—Education: Foundations and Policy Studies

EDG—Education: General

SSE—Social Studies Education

Graduate Courses

- EDF 5885. **Education in the Arab World (3).** Examines the development of Arab education focusing on curriculum and problems of learning and instruction. Patterns of language teaching and multiculturalism are carefully described and analyzed.
- EDF 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 5665. **Inquiry in Teaching Social Studies (3).** Corequisites: SSE 5366, 5367. Provides theory and practice in discovery, problem solving, and inquiry teaching of social science.
- SSE 5675. **Seminar in Civic Education (3).** This seminar focuses on both historical and contemporary research pertaining to civic education. Students conduct research on civic education as it pertains to the teaching of history and the social sciences.
- SSE 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 5937r. **Special Topics in Social Science Education (3).** An analysis of selected topics in social science education. May be repeated to a maximum of nine (9) semester hours.
- SSE 5943. **Field Laboratory Internship (1-8).** (S/U grade only.)
- SSE 5946r. **Supervised Teaching (1-4).** (S/U grade only.) May be repeated to a maximum of five (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).** (P/F grade only.)
- SSE 8966r. **Master's Comprehensive Examination (0).** (P/F grade only.)
- SSE 8968r. **Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- SSE 8976r. **Master's Thesis Defense (0).** (P/F grade only.)
- SSE 8978r. **Specialist in Education Thesis Defense (0).** (P/F grade only.)
- SSE 8985r. **Dissertation Defense (0).** (P/F grade only.)

**Department of
MODERN LANGUAGES AND LINGUISTICS**

COLLEGE OF ARTS AND SCIENCES

Chair: William Cloonan; **Professors:** Cloonan, Darst, Fernandez, Fleming, Hargreaves, Leparulo, Pietralunga, Sharpe, Walters; **Associate Professors:** Adolph, Arias, Boutin, Cappuccio, Efimov, Galeano, Gomariz, Lan, Poey; **Assistant Professors:** Alvarez, Gonzalez, Leeser, Leushuis, Maier-Katkin, Pichugin, Reglero, Romanchuk, Sunderman, Tarpley, Wakamiya, Willstedt, Yasuhara, Zanini-Cordi; **Associate in Modern Languages:** Adolph, Schlenoff; **Assistant in Modern Languages:** Cameron, Feng, Gray, Parrat; **Visiting Assistants in Modern Languages:** ; **Instructor in Modern Languages:**

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, non-thesis 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.

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 course work, 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 toward 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 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. The student must demonstrate adequate aural comprehension and oral fluency in French or Spanish, whichever is appropriate.
6. 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. Non-anglophone students may not choose English as a foreign language.

Definition of Prefixes

- CHI**—Chinese
CZE—Czech Language
FOL—Foreign and Biblical Languages
FRE—French Language
FOW—Foreign and Biblical Languages, Comparative Literature (Writings)
FRW—French Literature (Writings)
GER—German
GET—German Literature in Translation
GEW—German Literature (Writings)
ITA—Italian Language
ITW—Italian Literature (Writings)
JPN—Japanese

- LIN**—Linguistics
POR—Portuguese Language
POW—Portuguese Literature (Writings)
RUS—Russian Language
RUT—Russian Literature in Translation
RUW—Russian Literature (Writings)
SEC—Serbo-Croatian Language
SLL—Slavic Languages
SPN—Spanish Language
SPW—Spanish Literature (Writings)

Graduate Courses

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 5069r. Reading Knowledge Examination (0).** (S/U grade only.) Translation examination to ascertain the student's ability to read research materials written in French. Use of translation software is prohibited.
- FRE 5456. Stylistics (3).** A systematic study of the stylistics and idiomatic differences between French and English, designed to improve writing skills.
- FRE 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 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 toward the degree. May be 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 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 theater, 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 5598r. Studies in 20th-Century Pre-War (1900-1940) French Literature: Figure or Movement and/or Genre (3).** Authors and movements such as the following are considered: Paul Claudel, Paul Valery, Andre Gide, Marcel Proust, Alain-Fournier, Surrealism, "Unanimisme," Francois Mauriac, Jean Giono, Georges Bernanos, Jean Giraudoux, Roger Martin du Gard, Antoine de Saint-Exupery, Guillaume Apollinaire, etc. Works studied include novels, plays and poetry. May be repeated to a maximum of six (6) semester hours.
- FRW 5599r. Studies in 20th-Century Post-War (1940 to the present) French Literature: Figure or Movement and/or Genre (3).** This course covers post-WWII literary movements in the novel, theater and poetry. Authors studied include Michel Butor, Albert Camus, Samuel Beckett, Jean Cocteau, Henri Michaux, and others. May be repeated to a maximum of six (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 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).** (P/F grade only.)
- FRW 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- FRW 8976. Master's Thesis Defense (0).** (P/F grade only.)
- FRW 8985r. Dissertation Defense (0).** (P/F grade only.)

German

Advanced Undergraduate Courses

Note: *Graduate students must obtain permission of the German coordinator and associate chair for graduate studies to take these courses for credit.

- GER 4420.* Advanced Composition (3).** Prerequisite: GER 3400 or equivalent. Course objective is an ability to write with a developed personal style in German on intellectually demanding topics, including commentary on literature. Near mastery of German grammar is a prerequisite. The course is conducted in German.
- GER 4480.* Modern German of the News Media (3).** Prerequisite: GER 3400 or 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 5069r. Reading Knowledge Examination (0). (S/U grade only.) Translation examination to ascertain the student's ability to read research materials written in German. Use of translation software is prohibited.

GER 5425. Essay Workshop (3). The objective is the ability to write in German at a level that approximates native use of the language for advanced cultural discourse in general and literary commentary in particular. The workshop setting is designed for collaborative learning through discussions of various styles in existing texts, for the purposes both of recognizing stylistic properties of different types of texts and of selecting styles for the student's own uses, and through collective critiques of the fellow student's writings. The course is conducted in German.

GER 5906r. Studies in German Language and Literature (3). Topic determined by student and faculty member directing the project. May be repeated to a maximum of nine (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 toward 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). (P/F grade only.)

GER 8976r. Master's Thesis Defense (0). (P/F grade only.)

German Literature in Translation

GET 5135. German Literature in Translation (3).

GET 5525r.* German Cinema (3). Studies the contextual and stylistic features of German cinema from its classical period in the 1920s to the recent New German Cinema of the 1970s. Focus is on methods of film analysis and film criticism. May be repeated to a maximum of six (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 5069r. Reading Knowledge Examination (0). Translation examination to ascertain the student's ability to read research materials written in Italian. Use of translation software is prohibited.

ITA 5455r. Advanced Italian Composition and Style (3). Prerequisite: Advanced standing. This course stresses the morphological and syntactical order of Italian by means of extensive drills in controlled and free composition. Theme writing at the advanced level. May be repeated to a maximum of nine (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 toward the degree. May be repeated to a maximum of nine (9) semester hours.

ITA 8966. Master's Comprehensive Exam (0). (P/F grade only.) The examination is based on the Modern Language Association reading lists and represents the five areas of specialization.

Italian Literature (Writings)

ITW 5415. Italian Renaissance Literature (3). Prerequisite: Advanced standing. Course offers selected readings and discussions of the literature of the Italian Renaissance including such figures as Alberti, Lorenzo de Medici, Poliziano, Machiavelli, Michelangelo, Ariosto, and Tasso.

ITW 5445r. 18th- and 19th-Century Italian Literature (3). Prerequisite: Advanced standing. This course offers advanced readings and discussions of the figures and movements of the 18th and 19th centuries, including Goldoni, Alfieri, Foscolo, Manzoni, Leopardi, and Verga. May be repeated to a maximum of six (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 4930r. Topics in Linguistics (3). Students arrange with individual faculty members to undertake study in areas outside the regular curriculum.

Graduate Courses

LIN 5035. Historical/Comparative Linguistics (3). This course parallels in breadth, but not in depth, the reading and other assigned outside work of the undergraduate course involving sound change, possible causes of sound change, several different theories of sound change, and other controversial problems.

LIN 5045. Descriptive Linguistics (3). This course parallels in breadth, but not in depth, the reading and other assigned work of the undergraduate course concerned with the scientific study of human language, analytic methods, and models of linguistic description.

LIN 5510. Transformational Grammar (3). Covers, in addition to the fundamentals of transformational grammar, more current developments in linguistic theory, such as X-bar syntax, Government and Binding, Relational Grammar, etc.

LIN 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 5932r. Topics in Linguistics (3). Different topics are selected to suit the needs and interests of students. A special effort will be made to select topics related to current theoretical and practical issues. May be repeated to a maximum of twelve (12) semester hours.

Portuguese (Brazilian)

Advanced Undergraduate Courses

POR 4905r. Directed Individual Study (3). Students arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six (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 5069r. Graduate Reading Knowledge Examination: Portuguese (0). (S/U grade only.) Translation examination to ascertain the student's ability to read research materials written in Portuguese. Use of translation software is prohibited.

POR 5930r. Studies in Portuguese (Brazilian) Language and Literature (3). May be repeated to a maximum of nine (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 Prose (3). Prerequisite: RUW 3100, 3101, or equivalent.

RUW 4470r. Modern Russian Literature (3). Prerequisite: RUW 3100, 3101, or equivalent. May be repeated to a maximum of nine (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 5069r. Reading Knowledge Examination (0). (S/U grade only.) Translation examination to ascertain the student's ability to read research materials written in Russian. Use of translation software is prohibited.

RUS 5415r. Graduate Russian Conversation and Comprehension (3). (S/U grade only.) Extensive conversation and comprehension practice on contemporary themes. May be repeated once for credit to a maximum of six (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 toward the degree. Course may be 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 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, Turgenyev, 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). (P/F grade only.)

SLL 8976. Master's Thesis Defense (0). (P/F grade only.)

Spanish

Advanced Undergraduate Courses

Note: *Graduate students must obtain permission from the Spanish coordinator and the associate chair for graduate studies in order to take these courses for credit.

SPN 4420.* Advanced Spanish Composition and Translation (3). Prerequisite: SPN 3311 or equivalent. Stresses composition in Spanish with less emphasis on translation from Spanish into English. For students with prior knowledge of essential points of Spanish grammar.

SPN 4440.* Business Writing in Spanish (3). Prerequisites: SPN 3310, 3311. Letter writing, business terminology, doing business in the Hispanic world.

SPN 4700.* Spanish Phonetics (3). Prerequisite: SPN 3311 or equivalent. Training in the production of acceptable speech sounds in Spanish and a knowledge of when to use those sounds (allophonic distribution). The class meets both in the classroom and in the language laboratory. The nonnative speaker can profit most from this course.

SPN 4930r.* Studies in Hispanic Language and Literature (3). For Spanish majors and minors (only) with at least six (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 5069r. Reading Knowledge Examination (0). (S/U grade only.) Translation examination to ascertain the student's ability to read research materials written in Spanish. Use of translation software is prohibited.

SPN 5795. Phonology of Spanish (3). Prerequisite: A working knowledge of spoken Spanish. Introduces the student to articulatory phonetics and the theory of Spanish phonology as a set of phonological rules determining allophonic distribution. Entails partial analysis of various dialects of Spanish during class and an assignment to make an analysis of the Spanish of some native speakers dialect.

SPN 5805. Spanish Morphology and Syntax (3). Prerequisite: A working knowledge of Spanish. Deals with syntactical and morphological rules based on early transformational grammar. Rules are tested in class discussion, and attempts are made to analyze prose and poetry according to the rules. Students make a syntactical analysis of one or more literary works, or parts of works, of their choice.

SPN 5845. History of the Spanish Language (3). A study of the various phonetic, lexical, and syntactic changes that led to the development of modern Spanish from Classical Latin through vulgar Latin, old Spanish, and Renaissance Spanish, including the changes undergone by American Spanish.

SPN 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 toward the degree. May be repeated to a maximum of nine (9) semester hours.

Spanish Literature (Writings)

SPW 5195. Studies in Hispanic Literatures and Cultures (3). Prerequisites: SPN3333, SPW 3030, or permission from the instructor. Specific literary and cultural topics in the field of Hispanic Studies from any region or period of the Spanish-speaking world. May be repeated to a maximum of nine (9) semester hours.

SPW 5216. Spanish Golden Age Prose (3). Reading and discussion of the great prose works from *La Celestina* to *El Criticón*. All Golden Age prose on the Spanish division graduate reading lists, with the exception of Cervantes' works, will be covered.

SPW 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 5275r. Spanish 20th-Century Novel (3). Spanish novel from the Generation of 1898 through the Post Civil War period. May be repeated to a maximum of six (6) semester hours.

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 *jarchachas* through Góngora and Quevedo.

SPW 5338r. Spanish Poetry from 1700 to the Present (3). Emphasis on close readings of poetic texts and major literary and artistic trends from Romanticism through the contemporary era. May be repeated to a maximum of six (6) semester hours.

SPW 5356. Spanish American Poetry (3). Study of the major tendencies and representative poets from the sixteenth century to the Modernist period.

SPW 5357. Contemporary Spanish American Poetry (3). A comprehensive study of the major trends, figures, and schools of Spanish American poetry since Modernismo.

SPW 5365. Spanish American Prose (nonfiction) (3). Study of the major tendencies and representative nonfictional prose writers up to the Contemporary period.

SPW 5385. Early and Modern Spanish American Prose Fiction (to 1927) (3). Study of the major tendencies and representatives of prose fiction up to the Modernists and Mundonovista novel and short story.

SPW 5386. Contemporary Spanish American Prose Fiction (since 1927) (3). A comprehensive overview of Spanish American prose since the advent of Jorge Luis Borges' short stories and the genres of the novel and short story, covering trends from the avant-garde to neo-realism, neo-naturalism, cosmopolitanism, and sociopolitical content.

SPW 5405. Medieval and Early Renaissance Spanish Literature (3). An examination of the major genres of the period together with readings of some secondary works. Topics: Epic and ballad, Clerical 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). (P/F grade only.)

SPW 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

SPW 8976. Master's Thesis Defense (0). (P/F grade only.)

SPW 8985r. Dissertation Defense (0). (P/F grade only.)

MOLECULAR BIOLOGY: see Biological Science

Program in MOLECULAR BIOPHYSICS

COLLEGE OF ARTS AND SCIENCES

Program Director: P. Bryant Chase

Molecular biophysics involves the application of the principles and techniques of biology, chemistry, physics, and mathematics to the study of biomolecular systems. Studies are aimed at advancing our understanding of fundamental biological structures and processes, information needed for the understanding of disease and for the design of novel therapeutic strategies. In general, these studies require a multidisciplinary approach that may include techniques derived from molecular biology, biochemistry, and biophysics. Biophysical techniques such as X-ray crystallography, electron microscopy, nuclear magnetic resonance (NMR), and other spectroscopic methods are common components of this work.

The development and application of physical techniques to study biological systems requires training in disciplines that have been traditionally divided into separate departments. To foster the development of a fully integrated research training program, the Institute of Molecular Biophysics was constructed in 1962 with funds from the Atomic Energy Commission, the National Institutes of Health, and the State of Florida. In this institute, students, postdoctoral fellows, and faculty formally associated with different departments share expertise and lab space. It is within this unique environment that the Molecular Biophysics Graduate Program is centered.

The program offers an interdisciplinary core of courses leading to the doctor of philosophy degree in molecular biophysics. To this end, students are required to participate in a curriculum that will provide them with a strong background in both the physical and biological sciences. The program is designed to produce researchers and scholars with a broad understanding of the fundamental processes of biomolecular systems, and a deep understanding of one or more experimental or theoretical approaches for the study of such systems. Research facilities available for the development of the graduate thesis include those located in the Institute of Molecular Biophysics, the departments of Biological Science, Chemistry and Biochemistry, Physics, and the National High Magnetic Field Laboratory. No master's degree is offered.

Admission

Application for admission is made directly to the Program Coordinator. The admissions committee will consider all applicants with a strong background in any physical or biological science, mathematics, or engineering with a demonstrated aptitude for quantitative analysis and problem solving. All applicants must meet the minimum criteria of a 3.0 undergraduate grade point average (GPA) for the past two years,

a combined score of 1100 on the verbal and quantitative sections of the Graduate Record Examinations (GRE), and provide three current letters of recommendation from individuals who are able to assess the applicant's academic and research potential. Official transcripts are also required. International students must score a minimum of 600 on the Test of English as a Foreign Language (TOEFL). Applicants are asked 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 during the first two years to enable students to attend national meetings. Travel money is also available for advanced students presenting research at such meetings.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Doctoral Degree Requirements

The direction and supervision of graduate work at the doctoral level resides primarily with the major professor (thesis adviser) and the supervisory committee. The University requires that the degree be completed within five calendar years from the time the student gains admittance to candidacy by passing the preliminary exam.

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 granting doctoral directive status to the student's major professor
4. Attend one of the following seminar series (though not necessarily the same series every semester) throughout the graduate career, and present at least one seminar each year in the program:
 - BCH 6896r Biochemistry Seminar (1) (same as BCH 6897r)**
 - BSC 6921r Colloquium in Biological Science (1)**
 - CHM 6590r Physical Chemistry Seminar (1)**
 - PSB 6920r Neuroscience Colloquium (1)**
5. Successfully complete the oral and written components of the preliminary doctoral examination
6. Submit a doctoral research proposal approved by the major professor and the supervisory committee
7. Submit, publicly present, and successfully defend an original dissertation

Course Requirements

1. Students with very different backgrounds in biological or physical sciences may be admitted to the program. Thus, some may be required to take additional courses to provide an adequate background for graduate training in molecular biophysics, including a minimum of one (1) semester of biochemistry and physical chemistry at the undergraduate level. This requirement may be met by taking the appropriate courses at Florida State University or equivalent courses from other institutions. Descriptions for all courses may be found under the appropriate departmental listings
2. To help the student select a major professor and a dissertation topic, first year students are required to complete three lab rotations with faculty approved by the Graduate Program Committee. Each rotation will be for a minimum duration of eight weeks. Credit for the rotations is obtained by registering for the following course during the first year:
 - MOB 5905r Directed Individual Study (1–12) [rotation]**

- 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)
 - PSB 5077 Responsible Conduct of Research (1-2)
- An additional nine (9) semester hours are required, selected from courses offered by the Departments of Chemistry and Biochemistry, Biological Sciences, Physics, Mathematics, Neuroscience, and others. These courses must contribute directly to progress toward the degree program.

Definition of Prefix

MOB—Molecular Biophysics

Graduate Courses

MOB 5905r. Directed Individual Study (1–12). (S/U grade only.) Provides students with an opportunity to gain practical experience using different laboratory techniques, instruments, and equipment in research projects assigned by and under the close supervision of professors affiliated with the MOB graduate program. One-on-one discussions will assure understanding of necessary basic scientific research approaches. May be repeated to a maximum of fifty (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). (P/F grade only.) A comprehensive examination. Passing exam required for admission to doctoral candidacy.

MOB 8965r. Thesis Prospectus Defense (0). (P/F grade only.) Prerequisite: MOB 8964. A formal grant proposal, or prospectus, in the NIH or NSF format describing preliminary results and proposed experiments is submitted to the doctoral supervisory committee followed by a formal oral presentation and an oral defense of the prospectus.

MOB 8985r. Dissertation Defense (0). (P/F grade only.)

MOTION PICTURE, TELEVISION, AND RECORDING ARTS

COLLEGE OF MOTION PICTURE, TELEVISION, AND RECORDING ARTS

Dean: Frank Patterson; **Associate Dean:** Reb Braddock; **Professor:** Tomasulo; **Associate Professor:** Auzenne; **Filmmakers in Residence:** Allen, Chalmers, Kaleko, Long, Metz, Meyer, Portman, Robertson, Scoon; **Distinguished Visiting Filmmaker At Large:** Lyles; **Visiting Filmmakers in Residence:** Carruth, Nuñez, Scott; **Dean Emeritus:** Fielding

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. Emphases in screenwriting and production are offered, with curricula designed to furnish the conceptual framework, the professional training, and the working environment for eventual participation in a profession that is a powerful influence in our culture. The goals of the College of Motion Picture, Television, and Recording Arts (The Film School) are to fully educate students, help them become integrated members of the academic community of Florida State University, become responsible members of the entertainment profession, and participate in a creative and artistic process.

Faculty Distinctions

The 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 comprises working filmmakers with various specializations as writers, directors, producers, cinematographers, audio designers, production designers, and editors in both the theatrical and non-theatrical film and television industries, many of whom have won national and international awards and honors for their work. Some of these also have a strong record as research scholars and

as writers of fiction. The faculty also includes visiting professors from the field of motion picture law, business, distribution, exhibition, and promotion.

Facilities

The Film School operates extensive production facilities for its graduate and undergraduate programs in the University Center "A" Building on Florida State University's campus in Tallahassee. Considered one of the finest facilities in the world devoted exclusively to film education, it includes two sound stages; a recording stage with Foley and ADR capabilities; a 120-seat screening theatre and three smaller screening rooms; three digital audio mixing suites; a computer laboratory; a set-building shop; a 35mm archive of feature films; a 5,000 title collection of films on videotape, DVD, and laserdisc; a large production research library; and digital editing suites for picture and sound. Production facilities are available for both 16mm and 35mm production.

MFA Program

The goals of this professional degree are:

- To ground students in the history, theory, and practice of narrative filmmaking
- To provide the creative and technical environment for professional specialization to take place
- To help graduates begin careers in screenwriting, producing, directing, camera, sound, editing, and production design
- To provide interaction with a wide range of film and television industry professionals in order to provide information on the most recent trends and processes in the film/television business

To these ends the college's approach emphasizes three kinds of learning experiences: 1) course work in history, theory, style, technology, and techniques; 2) seminars in specific skill areas conducted by active professionals; and 3) independent production projects. Production students work in teams on narrative films. These films are written, produced, directed, shot, recorded, and edited by Film School students. In addition, the students engage in financial, legal, distribution, and exhibition aspects of the film/television business.

The program is designed and scheduled to provide training of the highest quality. It is meant to create a practicum setting in which individuals can work with accomplished professionals to hone their talents, develop a body of work, and sharpen their capacities to work in teams.

Financing and Ownership of Student Films

The 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 Florida State University and are copyrighted in the name of Florida State University. The same regulations and rules provide that in the event of the commercial exploitation of these films, any net revenues derived from a particular film will be split in a proportion to be determined by Florida State University (currently 50/50) between The 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 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 Examination (GRE). Application deadline for the graduate program is December 15th for consideration for Fall admission. Complete information on admission is available from the College of Motion Picture, Television, and Recording Arts Web site at <http://film.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 for production students, or sixty-three (63) semester hours for writing students, and must be completed in six consecutive full-time semesters.

Retention and Evaluation

All students must meet the University's minimum retention standards for graduate studies. Additionally, continuation in the graduate 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. Given the rigorous nature of the conservatory setting, absences are discouraged. Approval of absences is at the discretion of the instructor and will require documentation to confirm legitimacy of the absence.

Any unauthorized use or possession or willful destruction of 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 each semester. Any candidate who fails to maintain high standards will be placed on probation or dismissed from the program and will receive written notification.

Financial Aid

Please refer to the 'Assistantships' section in the "College 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 (a copy of the 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 5021. History and Criticism I (3).** Historical survey of the film medium worldwide, from its invention to the modern era.
- FIL 5022. History and Criticism II (3).** Prerequisite: FIL 5021. Survey of theories and movements in motion picture history.
- FIL 5155L. Screenwriting 1: Techniques and Treatments (2-6).** Prerequisite: MFA admission. Corequisite: FIL 5005. Introduction to working knowledge of basic narrative elements and how these work in conjunction to form a story. Through developing, writing, re-developing, and then re-writing a script, the student will gain the basic understanding of script language and process.
- FIL 5156L. Screenwriting 2: Narrative Techniques (2-6).** Prerequisite: FIL 5155L. Course examines how to create dimensional characters and a well structured story that works in the context of a feature length format through experiencing the writing of a feature film script.
- FIL 5157L. Screenwriting 3: Advanced Workshop (2-6).** Prerequisite: FIL 5156L. Offers an advanced approach to writing a 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 5159. Screenwriting V: Motion Picture Workshop (3).** Writing feature-length film scripts using the dramatic elements and skills developed in prior courses.
- FIL 5408r. Preproduction and Production Planning (3-12).** Preproduction of MFA thesis projects. Provides student with advanced instruction related to their chosen field of specialization while requiring them to coordinate their efforts with those of their crew counterparts, up to the beginning of the thesis project production phase. Credit hours determined by work load assigned, according to student's area of emphasis. May be repeated to a maximum of twelve (12) semester hours. May be repeated during the same semester.
- FIL 5429L. Basic Film Production (2-6).** Prerequisite: MFA admission. Basic overview of the MacIntosh computer, the video signal, the film to video telecine process, audio recording, audio and video transferring, and operation of the School's post-production equipment as it relates to editing on the Avid Xpress. Covers basic editing procedures from start to finish—beginning with importing video and audio all the way through to outputting final project. May be repeated to a maximum of eighteen (18) semester hours.
- FIL 5458r. Principles and Practices of Technical and Creative Support (3).** Introduction to the principle technical and creative support positions in motion picture and television production. Delineates the responsibilities and interrelationships of all preproduction, production, and postproduction personnel. May be repeated to a maximum of fifteen (15) semester hours.
- FIL 5459. Practicum in Technical Support (1-12).** Comprehensive practical training for first-year students in below-the-line production and postproduction skills, including the work of the camera assistant, grip, gaffer, sound mixer, boom operator, sound engineer, assistant editor, and various others. Training is concurrent with students' crew work on multiple film productions. May be repeated to a maximum of twelve (12) semester hours.
- FIL 5484L. Directing Actors (2).** Basic introduction to the direction of actors and scene work in film. Students will learn techniques for creating dramatic choices that serve the needs of both actors and writers while maintaining a strong directorial vision and will gain insight into the directing process as it relates to four specific concepts: conflict, actions, point-of-view and objectives.
- FIL 5498L. Advanced Directing (2).** Prerequisite: FIL 5595. Through lectures, discussions, and practical exercises students will analyze various visual techniques employed by directors in motion picture production.
- FIL 5499. Acting for the Camera (3).** This course will provide students with a survey of traditional acting techniques and will contrast and compare those techniques to more commonly used contemporary techniques of on-camera actors. Students will learn to prepare and execute discussion with on-camera actors from various educational backgrounds.
- FIL 5519L. Camera and Light Mechanics (2-6).** Provides theoretical and practical knowledge of cinematography: cameras, lenses, film stocks and exposure, composition and lighting, with hands-on exercises. May be repeated to six (6) semester hours.
- FIL 5546. Advanced Sound (2-6).** Prerequisite: FIL 5593L. Advanced knowledge of production and post-production sound recording through the recording, sound editing and re-recording of Directing 3 film projects.
- FIL 5555L. Film Editing (2-4).** Prerequisite: MFA admission. Course examines basic and intermediate training of the editing procedure and practical editing techniques by developing the editing process which is a step-by-step evolution of editing motion pictures involving dailies, the rough-cut, the fine-cut, critique, and addressing emotion, continuity, pace, rhythm, and the smooth cut. May be repeated to a maximum of six (6) credit hours.
- FIL 5568L. Advanced Editing (2-6).** Prerequisite: FIL 5555L. Teaches advanced theories in film editing by experiencing the step-by-step evolution of motion picture editing involving dailies, rough-cut, fine-cut, critique, and addressing story, emotion, structure, transition, pace, rhythm, point-of-interest, stage-line and the smooth cut.
- FIL 5590L. Lighting Workshop (2-6).** Prerequisite: FIL 5519L. Explores the more complex aspects of cinematography beyond the basics; provides support, guidance and criticism for cinematography performed on Directing 3 film projects.
- FIL 5591. Production Design Workshop (2-12).** Overview of production design principles and practices used in the creation of sets, costumes, props, makeup, and special effects for motion pictures and television. Through lecture, text, and practical application, students acquire an in-depth understanding of how color and form inform character and story. Maybe repeated to a maximum twelve (12) semester hours.
- FIL 5592L. Sound Workshop (2).** This course provides a basic working understanding of sound recording of sound recording and the various stages of production and post-production.
- FIL 5593L. Post-production Sound Workshop (2).** Prerequisites: FIL 5592L. This course will provide an understanding of digital sound recording, sound mixing, and the various stages of sound post-production.
- FIL 5594r. Directing: Multi-camera Workshop (3-9).** The study, development, and direction of multicamera television productions. May be repeated to a maximum of nine (9) semester hours.

- FIL 5595L. Directing: Single-Camera Workshop (2).** A study and practice in the visual illustration of essential dramatic elements as they relate to the direction of motion pictures. May be repeated to a maximum of six (6) semester hours.
- FIL 5609. Computer Applications Workshop (3).** Computer applications for all phases of the motion picture and television industry.
- FIL 5635. Distribution and Financing Workshop (3).** A comprehensive analysis of the financing and distribution of motion pictures, video products, and television programs with an emphasis on rights acquisition, banking, and legal and contractual procedures and practices.
- FIL 5636L. Advanced Workshop in Area of Specialization (2–12).** Advanced, specialized production training in the student's primary area of production. May be repeated to a maximum of fifteen (15) semester hours.
- FIL 5642L. Producing 1 (2).** Provides an overview of film production management, with emphasis on the breakdown, scheduling, budgeting and preparation of short films.
- FIL 5646L. Producing 2 (2).** Prerequisite: FIL 5642L. Training and practice in the development of business structure for the purpose of producing motion pictures.
- FIL 5648Lr. Production Management (2).** Prerequisite: MFA admission. Introductory course to the production management process as it relates to both short film and feature film production. Through lecture, text and simulated practical application, students will acquire a working understanding of film producing from development to exhibition. May be repeated to a maximum of six (6) semester hours.
- FIL 5774r. Basic Video Production (3–6).** Prerequisite: MFA admission. Provides a comprehensive overview of the production and delivery of television programming. May be repeated to a maximum of six (6) semester hours.
- FIL 5781. Intermediate Television Editing (3).** Prerequisite: FIL 5774. Comprehensive survey of online video-editing methods and techniques, including a thorough exploration and usage of time-code technologies, A/B roll editing, switchers, digital video effects, and character generators.
- FIL 5782. Advanced Television Editing (3).** Prerequisite: FIL 5781. Students will develop an understanding of and skill with various computer-controlled editing systems from personal computers to Sony 910 computer controller.
- FIL 5805r. Critical Studies in Film and Television (3).** Examination of a particular theoretical or critical approach to film and television. May be repeated to a maximum of nine (9) semester hours.
- FIL 5806. Critical Methods in Motion Picture, Television, and Recording Arts (3).** Principles and practices of writing film/video criticism.
- FIL 5807. Critical Methods of Film Analysis (3).** Film study course providing students with an advanced understanding of the construction of the motion picture narrative language, stressing the students need to develop fluency in visual storytelling through a conscious building of a film literacy.
- FIL 5875r. Film Aesthetics (1).** Teaches the potential filmmaker to have their own aesthetics of filmmaking and to articulate that style by viewing various films with unique styles and aesthetics. Class discussion is also used to achieve this goal. Allows students to become more aware and conscious filmmakers through their ability to articulate their aesthetic. May be repeated to a maximum of four (4) 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 to a maximum of five (5) semester hours.
- FIL 5921r. Colloquium in Motion Picture, Television, and Recording Arts (3).** Specialized study in film/video history, criticism, theory, genres, movements, and filmmakers. May be repeated to a maximum of six (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. 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 5955r. Apprenticeship (1–12).** (S/U grade only.) Professional on-the-job training in an area of specialization. May be repeated to a maximum of twelve (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).** (P/F grade only.) Corequisite: FIL 5962r. Evaluation of first-year progress including public screening of MFA qualifying project and oral examination.
- FIL 5966. Comprehensive Exam (0).** (P/F grade only.)
- FIL 5975r. Thesis (3–12).** (S/U grade only.) Opportunity to design, execute, and report a major creative effort. May be repeated to a maximum of twelve (12) semester hours.
- FIL 5976. Master's Thesis Defense (0).** (P/F grade only.)
- FIL 5977r. MFA Thesis Production (3–15).** (S/U grade only.) Production of MFA thesis projects. Provides students with advanced instruction related to their chosen field of specialization while requiring them to coordinate their efforts with those of their crew counterparts, up to the thesis project postproduction phase. Credit hours determined by work load assigned, according to student's area of emphasis. May be repeated one time to a maximum of fifteen (15) semester hours. May be repeated during the same semester.
- FIL 5978. Defense of MFA Project (0).** (P/F grade only.)

MUSIC

COLLEGE OF MUSIC

Professors: Beckman, Bridger, Chapo, Clarke, Clary, Corzine, Darrow, Delp, Drew, Dunnigan, Fenton, Fisher, Gerber, Geringer, Goff, Harsanyi, Hoekman, Keesecker, Kite-Powell, Kosloski, Kowalsky, Kubik, Louwenaar, Madsen, L. Mastrogiacomo, Meighan, Ohlsson, D. Olsen, S. Olsen, Piersol, D. Seaton, Shellahamer, Spencer, Standley, Thomas, Welch, Wright, Zwilich; **Associate Professors:** Allen, Andrews, Bakan, Bowers, Brewer, Clendinning, Ebbers, Ford-Kronholz, Gaber, Georgiev, Gregory, Holzman, Kelly, Kennedy, Lata, Mathes, Peterson, Pope, Punter, Roman, Ryan, Stebleton; **Assistant Professors:** Anderson, Barnhart, Bish, Brister-Rachwal, Buchler, Callender, Gunderson, Jiménez, Jones, Jordan, Koen, Moore, Nalley, Newdome, Parks, Porter, Roberts, Rogers, Shaftel, Trujillo, Van Weelden, Von Glahn, M. Wingate; **Visiting Assistant Professors:** Amsler, Beck, Semmes, Vinayak; **Program Directors:** Hodges, McArthur, G. Seaton; **Faculty Librarian:** Clark; **Assistant Librarian:** Cohen

The graduate program of the College of Music is one of the largest and most comprehensive in the country. Accredited by the National Association of Schools of Music since 1930, the college has a long and illustrious history of graduating outstanding performers, composers, scholars, educators, and therapists.

The following are the graduate degrees offered by the College of Music:

Master of arts 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 College of Music offers a number of certificate programs that provide an additional specialized area of emphasis for graduate students. These include certificate programs in 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 College of Music.

For complete details of degree requirements, plus a description of the college, its facilities, opportunities, and available financial assistance, refer to the "College of Music" chapter of this *Graduate Bulletin*.

Definition of Prefixes

MUC—Music: Composition

MUE—Music Education

MUG—Music: Conducting

MUH—Music: History/Musicology

MUL—Music Literature

MUM—Music: Commercial Management/Administration

MUN—Music Ensembles

MUO—Music: Opera/Music Theatre

MUR—Music: Church

MUS—Music

MUT—Music: Theory

MUY—Music: Therapy

MVB—Applied Music: Brasses

MVH—Historical Instruments

MVJ—Applied Music: Jazz

MVK—Applied Music: Keyboard

MVO—Applied Music: Other

MVP—Applied Music: Percussion

MVS—Applied Music: Strings

MVV—Applied Music: Voice

MVW—Applied Music: Woodwinds

Graduate Courses

Composition

MUC 5110r. Composition (2). For non-composition majors only. May be repeated to a maximum of six (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 5096r. Arts in Medicine Service (1–3). This course orients, teaches, and coordinates students who wish to volunteer for Arts in Medicine practica at Tallahassee Memorial HealthCare. The purpose of the course is to allow each student to use his/her particular talents to benefit Tallahassee Memorial patients, families and staff. For each hour of academic credit, students are required to complete two (2) hours per week of volunteer service throughout the semester. May be repeated a maximum of three (3) semester hours.

MUE 5145. Significant Developments in Music Education Curricula (3). An analysis of developments in music education with implications for designing music education curricula, K–12.

MUE 5185. College Music Administration (3). Prerequisite: 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.

MUE 5657. Nonverbal Communication in Human Interaction (3). This course contributes to the student's knowledge and skill in decoding and encoding nonverbal communication.

MUE 5724. Music Measurement (3). This course provides basic information about and techniques used in the measurement of music behavior. The course consists of demonstrations and discussion of the measurement of physical elements of music performance, expressive aspects, music preference, emotional and physiological responses to music. Additional areas of discussion include the role, development and use of standardized testing and observation measures in music.

MUY 5305. Medical Music Therapy (3). The purposes of this course are to understand the role and scope of music therapy in medical treatment; to learn to design music activities in medical situations to reduce pain, anxiety and distress; to participate in field experiences observing medical music therapy practices in a hospital setting; and to learn medical documentation for clinical music therapy.

Conducting

MUG 5205r. Advanced Conducting: Chorus (2). Prerequisites: Graduate standing and experience in conducting. The study of choral literature through analysis and conducting.

MUG 5306. Advanced Conducting: Orchestra (2). Prerequisites: Graduate standing and experience in conducting. The study of orchestral literature through analysis and conducting.

MUG 5307. Advanced Conducting I: Band (2). Prerequisites: Graduate standing and experience in conducting. The study of wind literature through analysis and conducting.

MUG 5308. Advanced Conducting II: Band (2). Prerequisite: MUG 5307. Advanced conducting study of gesture, rehearsal techniques, and musical interpretation appropriate to wind performance practice.

MUG 5957. Master's Recital: Choral Conducting (2). (S/U grade only.) Required of choral conducting majors in lieu of thesis.

MUG 5976. Wind Ensemble/Band Master's Recital: Chamber (2). (S/U grade only.) The chamber recital required of wind ensemble/band conducting majors in lieu of thesis.

MUG 5977. Wind Ensemble/Band Master's Recital: Large Ensemble (2). (S/U grade only.) The large ensemble recital required of wind ensemble/band conducting majors in lieu of thesis.

MUG 5978. Master's Recital: Orchestral Conducting (2). The orchestral conducting recital required of instrumental conducting majors (orchestral emphasis) in lieu of thesis.

Jazz Studies

MVJ 5976. Master's Recital: Recital Preparation (2). Preparation of a master's level recital in jazz performance.

MVJ 5978. Master's Recital (2). Performance of a master's level recital in jazz performance.

Music History

MUH 5219. Music History Graduate Survey (2). A synoptic review of the history of music from Greek music to the present day. This course is required of all graduate music majors unless exempted by examination. Credit earned in MUH 5219 will not apply to credit-hour requirements of any degree in the College of Music.

MUH 5305. Seminar in Performance Practice I: Musical Performance During the Middle Ages and The Renaissance (3). This course examines a number of basic issues that stem from music of the Middle Ages and Renaissance that are still relevant for an understanding of all later musical performance.

MUH 5306. Seminar in Performance Practice II: Musical Performance During the Baroque, Classic, and Romantic Eras (3). This course examines a number of basic issues that stem from music of the Baroque, Classic, and Romantic eras that are still relevant for an understanding of all later musical performance.

MUH 5325, 5335, 5345, 5355, 5365, 5375. History of Music (three [3] hours each). 5325: Medieval; 5335: Renaissance; 5345: Baroque; 5355: Classical; 5365: Nineteenth Century; 5375: Twentieth Century.

MUH 5380. Music in the Humanities (3). Western music in historical perspective. For non-specialists.

MUH 5410. The Notation of Polyphonic Music to 1600—Black Notation (3).

MUH 5411. Notation of Polyphonic Music II (3). A study of white mensural notation and the various types of tablature notation.

MUH 5536. African Soundscapes (3). This course introduces graduate students and upper-level undergraduates to the diversity of musical cultures from the African continent. Students explore various case studies from the continent and develop tools to interpret their musical value and contextual meaning. A background interest in music, anthropology, performance studies, or African studies is recommended.

MUH 5546. Music of Latin America (3). A study of the musical cultures of Latin America, including Native American, European, African, and Asian derived, and syncretic or mestizo forms.

MUH 5547. Music in Latin America II (3). A study of the religions and art music of Latin America from the colonial period to the present.

MUH 5548. Music in the Caribbean (3). A survey of the musics of the Caribbean Basin: from Cuba to Trinidad-Tobago; the coastal regions of northern Venezuela and Colombia; and the eastern coasts of Central America and Mexico.

MUH 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 5939. Seminar in Organology (3).** This course surveys the classification and construction principles of musical instruments and how these affect aspects of the instruments' historical and cultural significance and musical performance.
- MUH 5945. Practicum in Collegium Directing (3).** This course prepares students to perform every aspect of running an early music program, including choosing the program, instrumentation, learning to teach a variety of early instruments, diction for singers, sources for instruments, music, and supplies. In addition, it provides students with administrative skills that are vital to maintaining a viable program.
- MUH 6687r. Advanced Seminar in Musicology I (3).** Doctoral-level study of research topics from all areas of musicological research. May be repeated to a maximum of nine (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-Classical.
- MUL 5436. Guitar Literature II (2).** A study of guitar literature from the Classical Period to the present.
- MUL 5445, 5446. Solo Music Literature Seminar–Winds (three [3] hours each).** Open to candidates for the master's and doctoral degrees in performance or by 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 develops 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 5815. Fundraising Strategies in the Arts (3).** This course develops an overview of the philosophies, processes and practices of raising funds in the arts; teaches a working vocabulary and language relative to development and fundraising practices in the arts; and further develops students' research, writing and presentation skills.
- MUM 5816. Audience Development, Marketing and Public Relations in Musical Arts Organizations (3).** In this course, Arts Administration majors study the broad scope of developing audiences for such musical organizations as symphony orchestras, chamber orchestras, choruses and opera companies. Topics include current audience development, marketing and public relations strategies in place at a variety of musical arts organizations; analyzing these practices; and making recommendations for alternative or additional strategies.
- MUM 5947r. Internship in Arts Administration (1–12).** (S/U grade only.) Internship in an arts administration setting, including a final written project. May be repeated for a maximum of twenty-four (24) semester hours.
- MUM 5948. Piano Technology Practicum (6).** This course develops concert-level modern piano tuning and historical temperament tuning and provides apprenticeship projects highlighting advanced restoration techniques and action geometry.

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

- MUL 5426. String Quartet Literature from Haydn to Bartok and Beyond (3).** Students in this course study several important string quartets in the literature, with a focus on understanding the development of the genre through time and improving listening skills through analysis of pieces studied.

- MUS 5226. French Language and Diction for Singers (3).** This course is the study of French diction and continuation of grammar studies from FRE 1120. The focus is on proper pronunciation of the French language and on grammar and vocabulary necessary for translating texts of French melodies and operas.
- MUS 5236. German Language and Diction for Singers (3).** This course is the study of German diction and continuation of grammar studies from GER 1120. The focus is on proper pronunciation of the German language and on grammar and vocabulary necessary for translating texts of German Lieder and operas.
- MUS 5246. Italian Language and Diction for Singers (3).** This course is the study of Italian diction and continuation of grammar studies from ITA 1120. The focus is on proper pronunciation of the Italian language and on grammar and vocabulary necessary for translating texts of Italian songs and operas.
- MUS 5325. Survey of the Music Industry (3).** Understanding the world of commercial music and techniques in personal marketability.
- MUS 5345. Music Instrument Digital Interface (3).** Corequisite: MUS 5346. Develop techniques in electronic music composition and all aspects of MIDI.
- MUS 5346r. Laboratory for Music Instrument Digital Interface (2).** Corequisite: MUS 5345. Laboratory application of MUS 5345. May be repeated to a maximum of six (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 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 5806r. Dynamic Integration (0–1).** This course heightens students' awareness of their minds and bodies in relation to performing on a musical instrument, addressing such topics as muscle balancing, concentration and performance anxiety. May be repeated to a maximum of one (1) semester hour.
- 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). (P/F grade only.) Prerequisite: Consent of instructor. May be repeated one time only.

MUS 8964r. Doctoral Preliminary Examination (0). (P/F grade only.) Prerequisite: Consent of instructor.

MUS 8965r. Doctoral Performance Comprehensive Examination (0). (P/F grade only.) Prerequisites: MUS 8964, consent of instructor.

MUS 8966r. Master's Comprehensive Examination (0). (P/F grade only.) Prerequisite: Consent of instructor.

MUS 8976r. Master's Thesis Defense (0). (P/F grade only.) Prerequisite: Consent of instructor.

MUS 8985r. Dissertation Defense (also used for Treatise Defense–Doctor of Music) (0). (P/F grade only.) Prerequisite: Consent of instructor.

MVV 5651. Flute Pedagogy (0–1). This course covers topics specific to teaching and playing the flute, including breathing, posture, embouchure, scales, fingers, sound, dynamics, tuning, repertoire, styles, music history, vibrato and other related topics.

Music Theory

MUT 5051. Graduate Theory Survey (3). A review of the tonal materials of the period of common harmonic practice. This course is required of all graduate music majors unless exempted by examination. Credit earned in MUT 5051 will not apply to credit-hour requirements of any degree in the College of Music.

MUT 5151. Introduction to Graduate Study in Music Theory (3). Basic principles of music theory and their application to graduate study in music.

MUT 5357. Jazz Theory/Arranging I (3). Prerequisite: MUE 5486 or 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 College 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 College 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 5629. Schenkerian Theory and Analysis II (3). Prerequisite: MUT 5627. This is an advanced course in analytical techniques as proposed by Heinrich Schenker.

MUT 5628. Atonal Analysis (3). Techniques for the analysis of non-serial atonal music.

MUT 5646r. Jazz Improvisation I (1). Prerequisite: Music reading. Skills in beginning jazz improvisation. May be repeated to a maximum of three (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 5255r. App Mus Sec, Tuba

MVH 5252r. App Mus Sec, Open Reeds (1–2)

MVH 5256r. App Mus Sec, Plucked Instruments (1–2)

MVH 5257r. App Mus Sec, Bowed Strings (1–2)

MVK 5251r. App Mus Sec, Piano

MVK 5252r. App Mus Sec, Harpsichord

MVK 5253r. App Mus Sec, Organ

MVO 5250r. Modified Credit, All Instruments (1)

MVP 5251r. App Mus Sec, Percussion

MVS 5251r. App Mus Sec, Violin

MVS 5252r. App Mus Sec, Viola

MVS 5253r. App Mus Sec, Violoncello

MVS 5254r. App Mus Sec, Double Bass

MVS 5255r. App Mus Sec, Harp

MVS 5256r. App Mus Sec, Guitar

MVV 5251r. App Mus Sec, Voice

MVW 5251r. App Mus Sec, Flute

MVW 5252r. App Mus Sec, Oboe

MVW 5253r. App Mus Sec, Clarinet

MVW 5254r. App Mus Sec, Bassoon

MVS 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 5353r. App Mus Prin, Guitar, Jazz

MVJ 5354r. App Mus Prin, Bass, Jazz

MVJ 5356r. App Mus Prin, Saxophone, Jazz

MVJ 5357r. App Mus Prin, Trumpet, Jazz

MVJ 5358r. App Mus Prin, Trombone, Jazz

MVJ 5359r. App Mus Prin, Percussion, Jazz

MVK 5351r. App Mus Prin, Piano

MVK 5352r. App Mus Prin, Harpsichord

MVK 5353r. App Mus Prin, Organ

MVO 5350r. Modified Credit, All Instruments (1)

MVP 5351r. App Mus Prin, Percussion

MVS 5351r. App Mus Prin, Violin

MVS 5352r. App Mus Prin, Viola

MVS 5353r. App Mus Prin, Violoncello

MVS 5354r. App Mus Prin, Double Bass

MVS 5355r. App Mus Prin, Harp

MVS 5356r. App Mus Prin, Guitar

MVV 5351r. App Mus Prin, Voice

MVW 5351r. App Mus Prin, Flute

MVW 5352r. App Mus Prin, Oboe

MVW 5353r. App Mus Prin, Clarinet

MVW 5354r. App Mus Prin, Bassoon

MVW 5355r. App Mus Prin, Saxophone

MV—(B, K, O, P, S, V, W) 5450r–5456r. Applied Music Major (four [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 5456r. App Mus Maj, Saxophone, Jazz

MVJ 5457r. App Mus Maj, Trumpet, Jazz

MVJ 5459r. App Mus Maj, Percussion, Jazz

MVK 5451r. App Mus Maj, Piano

MVK 5453r. App Mus Maj, Organ

MVO 5450r. Modified Credit, All Instruments (2).

MVP 5451r. App Mus Maj, Percussion

MVS 5451r. App Mus Maj, Violin

MVS 5452r. App Mus Maj, Viola

MVS 5453r. App Mus Maj, Violoncello

MVS 5454r. App Mus Maj, Double Bass

MVS 5455r. App Mus Maj, Harp

MVS 5456r. App Mus Maj, Guitar

MVV 5451r. App Mus Maj, Voice

MVW 5451r. App Mus Maj, Flute

MVW 5452r. App Mus Maj, Oboe

MVW 5453r. App Mus Maj, Clarinet

MVW 5454r. App Mus Maj, Bassoon

MVW 5455r. App Mus Maj, Saxophone

MVS 5505r. Orchestral Repertoire for Violin (1). Prerequisite: 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 5655. 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.

MVV 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.

MVV 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 Chamber Music (2). Techniques and specific skills of accompanying and coaching instrumental music.

MVK 5747. Techniques of Opera Coaching (2). Techniques and specific skills of playing and coaching operatic repertory.

MVK 5935r. Continuo Playing—Keyboard (1). Prerequisite: 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.

MVO 6060. Applied Music Graduate Coaching (1–2). Principal only. All instruments.

MVO 6065. Applied Music Graduate Coaching (2–4). Performance Major only. All instruments.

MV—(B, K, O, P, S, V, W) 6260r–6266r. Applied Music Secondary (two [2] hours each). Private instruction (See course description for MV(B, K, O, P, S, V, W) 5250–5256 series.) For students whose curriculum requires study of a secondary instrument. May be repeated to maximum of four (4) semester hours. Credit may be modified by electing MVO 6260r (1), all Instruments.

MV—(B, K, O, S, V, W) 6360r–6369r. Applied Music Principal (two [2] hours each). Private instruction. Principal instrument. (See course description for MV(B, J, K, O, P, S, V, W) 5350–5356 series.) For students whose major is not performance. May be repeated to a maximum of twelve (12) semester hours. Credit may be modified by electing MVO 6360r (1), all Instruments.

MV—(B, K, O, P, S, V, W) 6460r–6469r. Applied Music Major (four [4] hours each). Prerequisite: Admission to MV(B, K, O, P, S, V, W) 6460r–6469r series by qualifying audition. For performance majors. Private instruction. Major instrument. May be repeated to a maximum of twenty-four (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

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

MVV 6461r. App Mus Maj, Flute

MVV 6462r. App Mus Maj, Oboe

MVV 6463r. App Mus Maj, Clarinet

MVV 6464r. App Mus Maj, Bassoon

MVV 6465r. App Mus Maj, Saxophone

MVS 6560r. String Repertory (0–1). 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 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 members are based in five departments: biological science; psychology; nutrition, food and exercise sciences; mathematics; and biomedical science. There is no master's degree in neuroscience, but MS degrees with a concentration in neuroscience are available through the participating departments, for work completed with neuroscience program faculty. The program was established to promote basic research and to provide graduate education in neuroscience, via a close mentoring relationship between students and faculty. Students entering the program choose a faculty adviser and enroll in that adviser's department. Students are able to begin hands-on research immediately while discovering modern neuroscience through courses covering a broad range of approaches, from molecular to behavioral. The requirements for the neuroscience degree are uniform across departments so changing adviser and department later is possible, for example to begin specialized PhD dissertation research. Interdisciplinary research training is available involving molecular, cellular, physiological and behavioral 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 Florida State University prominent neuroscientists who give colloquia and hold informal discussions with graduate students and faculty. Details on faculty/student research and program events may be found on the neuroscience program Web site at <http://www.neuro.fsu.edu>.

Admission Requirements

The admission process begins at the neuroscience program Web site: www.neuro.fsu.edu where there are links to the online 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 advisers 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 December 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 adviser, and ideally should contact these faculty members by phone or e-mail before applying. To ensure consideration by all potential faculty advisers, students who wish to begin PhD training immediately and those who wish ultimately to obtain the PhD in neuroscience should apply directly to the neuroscience program. Those interested only in MS-level training in neuroscience should check with the department of interest. Not all the participating departments nor all the neuroscience faculty accept students interested only in MS-level training. Additional information is available on the program Web site or by request to the program office.

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. 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
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

COLLEGE OF NURSING

Professors: Flannery, Frank, Grubbs, Mason, Speake; **Associate Professors:** Cottrell, Faria, Hauber, Karioth, Sullivan; **Assistant Professors:** Barth, Cormier, Maze, Porterfield, Warren, Whyte, Williamson, Zeni; **Assistants in Nursing:** Abendroth, Cuchens, Elliott, King, Lewis, Richbourg, Smith, Tucker, Wall

The Florida State University master of science program in nursing offers a dual emphasis graduate curriculum with both clinical specialization and role development emphases. 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 Commission on Collegiate Nursing Education.

Clinical Specialty

Family Nursing focuses on the care of clients in families at different phases of development. Newly formed families, childbearing families, or aging families 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/or chronic illness on family functioning is considered. Course content includes family concepts, theories, assessment, and care of families at various developmental levels and situations. Content and clinical experiences in advanced practice are components of this specialty.

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) or Adult Nurse Practitioners (ANP). In addition, the curriculum provides a foundation for specialties 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 College of Nursing or related disciplines such as those in 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 individuals' 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 college, its facilities, opportunities, and available financial assistance, refer to the "College of Nursing" chapter of this *Graduate Bulletin*.

Definition of Prefix

NGR—Nursing: Graduate

Graduate Courses

Note: Courses required for completion of the Master's Program are being revised. Contact the College of Nursing Graduate Office for current information.

NGR 5002C. Health Assessment for the Advanced Practice Nurse (4). This course provides the learner with a strong foundation in the health assessment skills requisite to APN practice. The focus of the course is on the diagnostic reasoning process as it relates to building a clinical database regarding an individual patient. History taking, physical examination skills, laboratory and radiographic modalities are included in the course content. The course has a clinical component wherein the students will utilize the diagnostic process in drawing conclusions based upon the database formed through various assessment modalities.

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 5052C. Clinical Nurse Specialist Care Management I (5). Prerequisites: NGR 5002C, 5102, 5135, 5740, 5800. This course provides learners with advanced knowledge and skills related to clinical management of actual and potential health problems in a variety of settings appropriate for the CNS Case Manager. Effective use of selected models of case management and other underlying theoretical frameworks are applied as well. Emphasis is placed on individual and family needs to include vulnerable and underserved populations. Clinical experiences are provided for the CNS Case Manager in a variety of settings.

NGR 5099C. Advanced Skills for the Advanced Practice Nurse (2). Prerequisite: NGR 5002C. The advanced skill course enables learners to develop skills for use in primary clinical practice. Students explore both the theoretical and practical aspects of a variety of procedures and diagnostic modalities including microscopy, suturing, EKG (basic and advanced), radiology, casting and splinting and dermatological procedures.

NGR 5102. Theories for Advanced Practice (3). This course analyzes and evaluates selected theories appropriate for advanced practice nursing. Topics include the relationship between theory, practice and research; sources of theory for the discipline; the contributions and philosophies of early nurse leaders and theorists; the process of theory development, evaluation and testing; and the practical application of nursing, development, family, health and other theories.

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 5135. Health Policy, Legal and Ethical Considerations for Advanced Practice (2). This course offers the student an opportunity to analyze the impact of health care policy, politics and delivery systems on the advanced practice nurse. Legal and ethical considerations that impact the nurse in the advanced practice role are examined in the context of providing quality and cost-effective services. The leadership role of the advanced practice nurse in designing strategies for enhancing health outcomes for diverse populations is also explored.

NGR 5149. Advanced Pathophysiology (4). Prerequisites: BSC 2085, 2085L, 2086, 2086L. This course is designed to acquaint the nursing graduate student with the principles of pathophysiology appropriate to entry-level graduate work.

NGR 5172. Pharmacology for Advanced Practice (3). Prerequisites: NGR 5102, 5135. This course provides a broad overview of pharmacology using a lifespan approach. Special consideration is given to professional, practice-related and statutory issues related to prescribing. A broad overview of agents commonly used in primary care is provided, with special consideration of the pharmaceutical properties, indications for, precautions with and selection of commonly prescribed agents. Emphasis is placed on facilitating pharmacologic management of patients for advanced practice nurses in independent and collaborative practice.

NGR 5250. Issues in Geriatrics Seminar (1). Prerequisites: NGR 5002C, 5102, 5135, 5740, 5800. The focus for this course is on the identification and analysis of issues and trends relevant to the geriatric population. Topics are analyzed using a problem-based learning approach and focus on desired resolution of identified problematic issues through current research and associated publications.

NGR 5303L. Pediatric Nurse Practitioner Practicum (5). Prerequisites: NGR 5002C, 5331C, 5332C. This course provides clinical experiences that are intended to demonstrate the culmination of the student's pediatric nurse practitioner role. Students are expected to complete their transition to the pediatric nurse practitioner role with the assistance of a physician or nurse practitioner. A practice setting is chosen by the student and faculty that reflects individual interests and completes the Advanced Pediatric Practice preparation.

NGR 5305. Issues in Pediatrics Seminar (1). Prerequisites: NGR 5002C, 5102, 5135, 5740, 5800. This course provides the student with current information related to issues that impact children today. A discussion format assists the student in learning more about those issues that have a significant effect on the child, the family and society. Current trends in health care and health care funding for issues that affect children are also discussed.

NGR 5331C. Advanced Management for the Pediatric Nurse Practitioner I (6). Prerequisite: NGR 5002C. Corequisite: NGR 5370. This course provides learners with advanced knowledge and skills related to diagnosis and clinical management of children ages newborn to 21 in a primary care setting. Examines methods of diagnosis, promotion of health, prevention of illness, and management of chronic and congenital disease.

NGR 5332C. Advanced Management for the Pediatric Nurse Practitioner II (7). Prerequisite: NGR 5331C. This course examines and refines methods of diagnosis and management of health problems that affect children ages newborn to 21. The focus is on the prevention of illness, promotion of wellness, and the management of complex acute health problems and their impact on communities. The role of the advanced pediatric nurse as a vital force in contemporary health care is explored. Clinical experiences are expanded to encompass a wider variety of primary care settings based on the student's needs.

NGR 5370. Pharmacology for Pediatric Nurse Practitioners (3). Prerequisite: NGR 5002C. This course provides a broad overview of pharmacology in neonatal and pediatric populations. Special consideration is given to professional, practice-related, and statutory issues related to prescribing.

NGR 5481. Women's Health Seminar (1). Prerequisites: NGR 5002C, 5102, 5135, 5740, 5800. This course affords the student the opportunity to explore and discuss current topics in women's health. The course encompasses clinical practice issues as well as the abundant research opportunities in the area of women's health.

NGR 5503. Advanced Practice Psychiatric Nursing Seminar (1). Prerequisites: NGR 5002C, 5102, 5135, 5740, 5800. This course provides the student with information related to commonly-occurring psychiatric/mental health concerns of clients in their APN practice. Assessment, counseling strategies, medication management, family involvement and appropriate referral are discussed in relation to select acute and chronic psychiatric problems. A developmental approach is incorporated. Primary, secondary and tertiary levels of treatment by the APN are addressed.

NGR 5601C. Advanced Management of the Family I (6). Prerequisites: NGR 5002C, 5102, 5135, 5740, 5800. Corequisite: NGR 5172. This course provides learners with advanced knowledge and skills related to the clinical management of actual and potential health problems across the life span in a primary care setting and examines and refines methods of diagnosis and management of health problems that affect the family. The focus is on promoting health, preventing illness and the management of common acute and chronic illnesses. Clinical experiences, encompassing clients across the age span and families, occur in various primary care settings. The role dimensions of manager, collaborator and teacher are explored within the context of the Family Nurse Practitioner role.

NGR 5602C. Advanced Management of the Family II (7). Prerequisite: NGR5601C. This course examines and refines methods of diagnosis and management of health problems that affect the family. The focus is on the prevention of illness, promotion of wellness, and the management of complex acute and chronic health problems and their impact on communities. The role of the advanced practice nurse as a vital force in contemporary health care is explored. Clinical experiences are expanded to encompass a wider variety of primary care settings based on the students' needs.

NGR 5621. Community Health Seminar (1). Prerequisites: NGR 5002C, 5102, 5135, 5740, 5800. This course provides students with an understanding of the role of the advanced practice nurse in the community health setting and the relationship between the practices of client and family and community health nursing. Additional focus is on strategies for bridging gaps in health care systems to improve the health care outcomes of diverse populations.

NGR 5637C. Clinical Nurse Specialist Care Management II (6). Prerequisite: NGR 5052C. This course is the second of a three-semester series that provides insight into the complexities of CNS clinical case management of the most prevalent chronic, disabling diseases in the country. The actual processes the nurses use are discussed and then applied in the clinical portion of this course, which 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 receptors, the student manages selected clients as a case load, utilizing the competencies and strategies of case management. Additionally, the student continues to develop clinical skills in the role of the CNS in the student's preferred specialty.

NGR 5700. Advances and Trends in Adult Health Nursing (1). Prerequisite: NGR 5149. The focus of this course is on the identification and analysis of knowledge, trends, and issues pertinent to advances in adult health nursing. Topics include disease processes such as diabetes mellitus, oncology/end-of-life issues, pain management issues, hypertension, congestive heart failure, asthma/COPD, and stroke.

NGR 5713C. Curriculum Theory and Design for Nursing Education (3). This initial course in the Nursing Educator sequence introduces the graduate nursing student to the theoretical foundations of nursing education. It also serves as an introduction to the relationship between these theories, curriculum development and course design, which are examined by the student in both classroom and clinical settings.

NGR 5714C. Teaching Methods for the Nurse Educator (4). This course introduces the graduate nursing student to the teaching methods of post-secondary nursing education and serves to link the student's knowledge of educational theories to teaching methods. Teaching opportunities are provided in the classroom and nursing education laboratory settings. May be taken concurrently with NGR 5713C.

NGR 5718C. Evaluation Methods in Nursing Education (4). Prerequisites: NGR 5713C, 5714C. This course focuses on educational program evaluation and change. The emphasis is on application of testing and measurement relevant to the health professions. The student learns effective test design and test writing skills. Methods of evaluating student performance in the classroom and clinical settings are also explored, and evaluation tools for educational programs, courses and students are discussed. The course addresses the change process in relation to educational outcomes and course evaluations.

NGR 5719. Issues in Nursing Education (1). Corequisites: NGR 5713C, 5714C, 5718C. This course introduces students to issues related to post-secondary nursing education. Students examine the impact of historical and contemporary issues in education and health care on the roles and responsibilities of an academic nurse educator.

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 5740. Role Development for Advanced Practice (2). This course provides the learner with an opportunity to explore the multiple roles of the advanced practice nurse. An historical perspective of the development of the expanded role is included, and topics related to practice issues are addressed. Strategies for transition from academia to practice environments are also analyzed.

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 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 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 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 5945L. CNS/Case Care Manager Practicum (2-5). Prerequisites: NGR 5747, 5753, 5753L. Practicum for CNS/Case Care Management Advanced Practice Nursing role. All sub-roles are practiced in the selected areas for case management.

NGR 5946L. Clinical Nurse Specialist Case Management Practicum (7). Prerequisite: NGR 5637C. This course in the Case Care Manager track allows the student to fully develop all the competencies and strategies utilized in the nurse case manager role. A practice setting is chosen by the student and faculty that reflects the student's individual interests. A case manager preceptor and nursing faculty provide supervision. Synthesis is provided through post-conference meetings.

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 toward 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). (P/F grade only.)

Department of NUTRITION, FOOD, AND EXERCISE SCIENCES

COLLEGE OF HUMAN SCIENCES

Chair: Bahram H. Arjmandi; **Professors:** Haymes, Hsieh, Ilich-Ernst, Moffatt, Sathe; **Associate Professors:** Abood, Dorsey, Levenson, Rankins; **Assistant Professors:** Kim, Panton, Spicer; **Assistants in Athletic Training:** Garber, Sehgal; **Courtesy Faculty:** Daggy, Stowers; **Coordinator of Food Service Administration:** Truesdell; **Professors Emeriti:** Erdman, Harris, Kassouny, Toole; **Adjunct Faculty:** Gibson, Kelly, Latimer, Oravetz, Orr, Pappas, Pfeil, Soumah, Watson.

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 a concentration in exercise physiology. Thesis and non-thesis options are available for the master's programs.

The department also has a dietetics internship program which, in conjunction with the master's degree in nutrition and food science, provides a post-baccalaureate route for students to become eligible to take the Registration Examination for dietitians. Students applying for the internship program must have completed 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 exercise physiology. These doctoral programs are designed to enable students to achieve mastery in a specialized area of nutrition, food science, or exercise physiology, 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 autonomic function in chronic 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 **Clinical and Functional Exercise Physiology 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 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
5. Nutrition education and health promotion

Thesis (thirty [30] semester hours minimum) and non-thesis (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. Non-thesis 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

Students in Movement Science are offered a concentration in exercise physiology.

Both thesis (thirty-six [36] semester hours) and non-thesis (forty-five [45] semester hours) programs are offered. Admission to the exercise physiology program 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 non-thesis option, the remaining requirements include HUN 5906 (three [3] semester hours), PET 8945r (nine [9] semester hours), and additional electives (nine [9] 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 University's 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.

Specific course requirements for doctor of philosophy in movement science with a 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).

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 members hold appointments in the Departments of Nutrition, Food, and Exercise Sciences, Biological Science and Psychology. Students enroll in the department of their initial faculty adviser/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 Web site at <http://www.neuro.fsu.edu>.

Definition of Prefixes

- DIE—Dietetics
- FOS—Food Science
- FSS—Food Service Systems
- HSC—Health Sciences
- HUN—Human Nutrition
- PET—Physical Education Theory

Advanced Undergraduate Courses

- DIE 4244. 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 non-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 (3). 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). (P/F grade only.)

HUN 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

HUN 8976r. Master's Thesis Defense (0). (P/F grade only.)

HUN 8985r. Dissertation Defense Examination (0). (P/F grade only.)

PET 5052. Motor Memory (3). Deals with behavioral theories, models, and related research on motor memory. Analyses made of the research evidence related to encoding, capacity, forgetting, storage mechanisms, control processes, organization, and error scores. Offered alternate years.

PET 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 5077. Physical Dimensions of Aging (4). The course deals with the quality of life, individual differences as we age, physical decline of physiological systems (cardiovascular, muscular, joints, bone, neuromuscular), health, exercise, and well-being, and the pathology of aging. Course assists students in developing an understanding of the physical aspects of aging to apply to setting such as physical therapy, sports medicine, and health and fitness programs in hospitals and retirement communities.

PET 5355C. Advanced Exercise Physiology (3). Physiological effects of acute and chronic physical exercise.

PET 5367. Nutrition and Exercise Performance (3). Immediate and long term effects of nutrition on exercise performance. Effects of acute and chronic exercise on nutrient requirements.

PET 5553. Cardio-respiratory and Anthropometric Evaluation and Development of Exercise Programs (3). Prerequisite: PET 5355C. This course is designed to examine techniques of cardiovascular, respiratory, and anthropometrical evaluation with a particular emphasis on aerobic capacity and body composition and to design, implement, and administer exercise programs for developing physical fitness.

PET 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 6365. Exercise and the Cardio-respiratory System (4). Prerequisite: Advanced exercise physiology. A study of the cardio-respiratory system during exercise and the adjustments within the system to exercise training and other stressors.

PET 6368. Metabolic Responses to Exercise (3). Consideration of the processes involved in the production and utilization of energy in exercise and the effects of training.

PET 6386. Environmental Aspects of Exercise (3). Focuses on the effects of temperature, altitude, and air pollution on exercise performance. Offered alternate years.

PET 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: William K. Dewar; **Professors:** Burnett, Chanton, Chassignet, Clarke, Dewar, Froelich, Huettel, Iverson, Krishnamurti, Landing, Marcus, Nof, O'Brien, Speer, Thistle, Weatherly; **Associate Professor:** Kostka; **Assistant Professors:** Dittmar, Nowacek, St. Laurent; **Professors Emeriti:** Hsueh, Stern, Sturges, Winchester

A graduate program in oceanography has existed at Florida State University since 1949. The department offers both the master of science (MS) and doctor of philosophy (PhD) degrees in oceanography with specializations in: biological, chemical, geochemical, and physical oceanography. Especially during the last decade, the 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. An Emeritus faculty member has also been a recipient of the John Simon Guggenheim Award and has been elected to the National Academy of Sciences, and a current faculty member received the Nansen Medal from the European Geosciences Union.

Current research projects are funded by the National Science Foundation, NASA, U.S. Department of Energy, Florida Department of Environmental Regulation, Office of Naval Research, and the National Center for Atmospheric Research. These include ocean modeling with supercomputers, direct observations of ocean currents with current meters, analysis of environmental pollution, and studies of microbial and zooplankton populations, and benthic ecology.

Frequently utilized external resources include the marine laboratory at Turkey Point, 45 miles away from Tallahassee on the Gulf of Mexico; the School of Computational Science; 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 specialties 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. There is also a non-thesis Masters in Aquatic Environmental Science.

As a minimum standard, a "B" average is expected in all undergraduate classes, and a total score of 1100 combined verbal and quantitative on the Graduate Record Examinations (GRE) aptitude test is required of all applicants. Current enrollment trends indicate that a record considerably above the minimum is necessary to assure admission to the limited number of places available.

The paragraphs below suggest the proper preparation for each of the four areas of specialization in oceanography.

Graduate Certificate Program in Oceanography

The department of Oceanography offers a graduate certificate program in oceanography for students in their senior year of undergraduate study in a science, math, or engineering program, or anyone who holds a bachelors degree in a relevant field (e.g. biology, chemistry, engineering, geology, mathematics, meteorology, physics). Applicants must have a 3.0 GPA; however, no standardized test scores are required.

This program offers an introduction to the interdisciplinary field of oceanography to enrich a student's background for professional work or as a precursor to graduate study leading to a degree. Program course work is recorded on the student's official university transcript and provides an educational credential that documents the additional training the student has received. To earn a graduate Certificate in Oceanography, students must complete fifteen (15) semester hours of course work, including the writing of a research paper. The program of study must include two courses from the Core Curriculum, electives selected from the graduate level offerings in the department of Oceanography and supervised research in the final semester.

Master's in Aquatic Environmental Science

The Aquatic Environmental Science program provides students with a broad understanding of the interaction of the physics, biology, chemistry and geology of aquatic (marine and freshwater) systems and how such interactions are affected by and impact upon human activities. It is intended for students whose career goals do not include the pursuit of scientific research.

The Aquatic Environmental Science Master's degree program is open to anyone who holds a bachelor's degree in one of the natural sciences, mathematics, or engineering. Applicants must have a 3.0 GPA and a total score of 1100 combined verbal and quantitative on the Graduate Record Exam. The program is course-based, and includes a capstone experience. Thirty-six (36) hours of 5000-level course work is required. Six (6) hours must be Capstone Experience credits. In the Capstone Experience, students produce and present a paper on an issue, policy or problem in environmental science demonstrating adequate knowledge of the environmental science field and the ability to synthesize information from multiple sources into a cohesive and meaningful paper. A faculty director guides students' progress in the program. The university requires that at least twenty-one (21) of the thirty-six (36) hours must be taken on a letter grade basis. The required course work must be taken in the Department of Oceanography or in other scientific disciplines as the individual's interest and capstone experience paper dictate.

If an AES student is admitted to the department for a research-based Master's in Oceanography, his or her supervisory committee decides on a case by case basis if any courses taken for the Masters in Aquatic Environmental Sciences can be applied to the Oceanography degree requirements.

General Undergraduate Preparation

One year of college physics, one year of college chemistry, and one year of calculus.

Specialty Undergraduate Preparation

Biological: bachelor of science (BS) or bachelor of arts (BA) in biology with 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, asymptotic 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 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—Biological Oceanography
- OCC—Chemical Oceanography
- OCE—General Oceanography
- OCG—Geological Oceanography
- OCP—Physical Oceanography

Graduate Courses

Core Curriculum

- OCB 5050. **Basic Biological Oceanography (3).** Introduction to the organization of benthic and planktonic communities in the ocean.
- OCC 5050. **Basic Chemical Oceanography (3).** Prerequisite: CHM 1046. The chemical composition of seawater, carbon dioxide system, nutrients, trace elements, biogeochemistry.
- OCG 5051. **Basic Geological Oceanography (3).** Structural and oceanographic setting of continents and ocean basins, plate tectonics, ocean margins, marine sediments, and ocean history.
- OCP 5050. **Basic Physical Oceanography (3).** Prerequisite: MAC 2311. Seawater properties, currents, waves, tides, and acoustics. Not open to students in physical oceanography option.

Biological Oceanography

- OCB 5015. **Marine Nekton: Larval Fish to Whales (3).** Prerequisites: BSC 2011, 2011L; PCB 3743 or 4674. This course provides an overview of marine nekton, including bony and cartilaginous fishes, cephalopods, reptiles and mammals. It covers the taxonomy, anatomy and functional morphology and physiology of these groups, including aspects of their relationships with humans.
- OCB 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.

OCC 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.

OCC 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 5415. Marine Geochemistry (3). Prerequisite: OCC 5050. Introduction to geochemistry of earth with emphasis on processes controlling elemental cycling between the earth's crust, oceans, and atmosphere. Controls on the chemical composition of seawater and its geological history.

OCC 5417. Geochemical Ocean Tracers (3). Prerequisites: OCC 5050; OCP 5050. Mixing models and processes affecting dissolved concentrations and distributions of chemicals and radiotracers in the world's oceans.

OCC 5554. Atmospheric Chemistry (3). Prerequisites: CHM 4410; OCP 5050; OCC 5050. Formation and transport of atmospheric trace gases and aerosols.

OCG 5457. Stable Isotopes as Tracers in Aquatic Ecosystems (3). Prerequisites: a 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.

OCG 5664. Paleooceanography (3). This course examines the paleochemical record of climate change, continental and oceanic archives of past environmental change, processes and models of climate evolution over the Cenozoic with emphasis on the most recent Ice Ages, and readings from the current literature.

Physical Oceanography

MAP 5431. Introduction to Fluid Dynamics (3). Prerequisites: PHY 3048C, MAP 4153; Corequisite: MAP 4341, 5345, or 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 5256. 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 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

OCC 5930r. Special Topics in Biological Oceanography (1–3). May be repeated to a maximum of thirty (30) semester hours.

OCC 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.

OCC 5908r. Directed Individual Study (1–12). (S/U grade only.)

OCC 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.

OCC 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.

OCC 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

OCC 5009. Advanced General Oceanography (3). An overview of geological, physical, chemical, and biological oceanography. The major hypothesis in each subdiscipline will be described. Cross-linkages between sub-disciplines will be used to show the interdisciplinary nature of modern oceanography.

OCC 5018. Current Issues in Environmental Science (3). Taught at an introductory level, this class includes discussions of current ground-breaking research, environmental problems and approaches to solving them. This course consists of presentations by experts on their current research topics or on environmental issues.

OCC 5554. Habitable Planet (3). Exploration of a variety of environmental issues of local to global scale. Format varies between student and professor presentations. Students are guided to produce a terminal master's project through this course. May be repeated to a maximum of Six (6) semester hours.

OCC 5934r. Capstone Experience (3). Prerequisite: permission of instructor. Exploration of a variety of environmental issues of local to global scale. Format varies between student and professor presentations. Students are guided to produce a terminal master's project through this course. May be repeated to a maximum of six (6) semester hours.

OCC 5971r. Thesis (1–6). (S/U grade only.) A minimum of six (6) semester hours is required.

OCC 6980r. Dissertation (1–12). (S/U grade only.) A minimum of twenty-four (24) semester hours is required.

OCC 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

OCC 8976r. Master's Thesis Defense (0). (P/F grade only.)

OCC 8985r. Dissertation Defense (0). (P/F grade only.)

OCG 5106. The Earth System (3). This course examines the modern approach to understanding Earth's climate history and climate change on a global scale.

OPERA/MUSICAL THEATRE:
see Music

ORAL INTERPRETATION:
see Communication

ORGANISMAL BIOLOGY:
see Biological Science

Department of PHILOSOPHY

COLLEGE OF ARTS AND SCIENCES

Chair: J. Piers Rawling; **Professors:** Bishop, Clarke, Dancy, Fleming, Leiber, McNaughton, Mele, Rawling, Ruse; **Associate Professors:** Dalton, Gert, McKenna, Morales; **Assistant Professors:** Costa, Roberts

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)
3. Minimum grade point average (GPA) of 3.0 in the last two years of undergraduate study

Requirements

Please review all college-wide requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

The department encourages students who are interested in receiving a PhD to enroll directly into that program. The department will admit students into the MA program, but those interested in a teaching career in philosophy will need to gain the PhD. After completing their preliminary exams and other requirements necessary to be admitted to candidacy for the PhD, students will be entitled to receive an MA. The department's *Graduate Handbook* contains detailed information concerning requirements and procedures for the graduate program and constitutes the complete statement of departmental policies and rules governing graduate study.

Doctoral students must pass the following classes with a grade of "B-" or better:

PHI 5555 Core Course in Metaphysics and Epistemology (3)

PHI 5665 Core Course in Ethics (3)

Students must also pass PHI 5135, Modern Logic I, with a grade of "B-" or better.

Doctoral students will take a preliminary examination in a special area related to the student's dissertation topic.

Doctoral students must complete at least ninety (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 PHI 5555 and 5665 with a grade of "B" or better.

Students must also pass PHI5135 with a grade of "B-" or better.

Master's students must complete at least thirty three (33) semester hours. The MA degree is awarded upon either the successful oral defense of an original thesis or completion of the MA exam.

Each student must maintain a cumulative GPA of at least 3.0. The department may at any time terminate the work of a student whose academic progress is judged unsatisfactory, and failure to maintain a satisfactory GPA is grounds for dismissal from the program.

Definition of Prefixes

PHH—Philosophy, History of

PHI—Philosophy

PHM—Philosophy of Man and Society

Graduate Courses

PHH 5105r. Greek Philosophy (3). Detailed study of Plato, Aristotle, or one of the schools or divisions of ancient thought (pre-Socratics, Stoicism, etc.). May be repeated to a maximum of twelve (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 philosophical movement (e.g., idealism, positivism, Marxism) of the nineteenth century. May be repeated to a maximum 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 6455. Philosophy of Biology: Basic Topics (3). A survey of basic topics in the philosophy of biology, including the nature of evolutionary theory, the coming of genetics, molecular biology and its philosophical implications, the Human Genome Project, Creationism, eugenics, and ecological questions.

PHI 6457r. Philosophy of Biology: Selected Topics (3). A study of advanced topics in philosophy of biology, including game-theoretic explanations in biology, the units of selection problem, reductionism in biology, systematics, and socio-biology and the is/ought gap. May be repeated to a maximum of nine (9) 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 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). (P/F grade only.)
 PHI 8966r. Master's Comprehensive Examination (0). (P/F grade only.)
 PHI 8976r. Master's Thesis Defense (0). (P/F grade only.)
 PHI 8985r. Dissertation Defense (0). (P/F grade only.)

PHOTOGRAPHY:
 see Art

PHYSICAL SCIENCE:
 see Physics

Department of PHYSICS

COLLEGE OF ARTS AND SCIENCES

Chair: David Van Winkle; **Associate Chair:** Mark Riley; **Professors:** Baer, Berg, Boebinger, Bonesteel, Brooks, Cottle, Dobrosavljevic, Duke, Hagopian, Kemper, Manousakis, Owens, Piekarewicz, Prosper, Rikvold, Roberts, Schlottman, Tabor, von Molnar, Wahl, Zhou; **Associate Professors:** Blessing, Cao, Capstick, Hoefflich, Lind, Ng, Reina, Shaheen, Xiong, Yang; **Assistant Professors:** Adams, Chiorescu, Crede, Eugenio, Fenley, Gershstein, Hirst, Rogachev, Vafek, Volya, Wiebe, Wiedenhoefer; **Professors Emeriti:** Albright, Desloge, Edwards, Fletcher, Fox, Kimel, Kromhout, G. Moulton, W. Moulton, Philpott, Plendl, Robson, Sheline, Skofronick, Testardi, Wang

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. The faculty believes that the quality of teaching, at all levels, is enhanced by a strong research program. Undergraduates, graduate students, and post-doctoral fellows participate in all aspects of research in physics at Florida State University. In fact, most undergraduate physics majors participate in research projects and many are co-authors on publications. This research includes strong programs in the area of computational physics and both experimental and theoretical studies in high energy, nuclear, condensed matter, and atomic and molecular physics. There are also many opportunities 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 (SCS), the Institute of Molecular Biophysics (IMB), and, as a separate degree program, in Chemical Physics.

Available experimental facilities include the following: a 9.5 MV Super FN Tandem Van de Graaff accelerator with superconducting post accelerator, the RESOLUT radioactive beam facility, a state-of-the-art gamma spectroscopy array, electron spin resonance and electron double nuclear resonance spectrometers, a detector development laboratory for high-energy particle detectors, liquid helium refrigerators, thin film preparation facilities including sputtering and laser ablation, ultrahigh vacuum instrumentation including surface analysis (LEED, Auger, optical) and molecular beam epitaxy, synthesis and characterization facilities for novel materials, three X-ray diffractometers with various sample stages for high and low temperature studies, multi-sample analysis and small angle studies, scanning electron, tunneling and optical microscopies with image analysis, SQUID and vibrating sample magnetometers, and a helium atom surface scattering facility. The NHMFL provides a modern infrastructure enabling research in magnetic fields including the highest powered DC fields in the world, mainly used

for materials science research, and facilities providing the highest fields in the world for nuclear, ion cyclotron and electron magnetic resonance spectrometers as well as magnetic resonance imaging.

Computers are an integral part of almost all 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 maintains a Physics Instructional Computer Laboratory (PICL) for students. In addition to using computers 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 student must pass with a cumulative grade average of no less than "B." These courses are PHY 5246, Theoretical Dynamics; PHY 5524, Statistical Mechanics; PHY 5346 and PHY 5347, Electrodynamics A, B; and PHY 5645 and PHY 5646, Quantum Mechanics A, B.

For the **Master's** degree a student must take 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 PHY 5667, PHY 5670, or PHY 6938. After attaining mastery of the content of the core graduate courses, a PhD student is required to take two (2) of the following four (4) courses: PHZ 5305, PHZ 5354, PHZ 5491 or PHZ 5715. In addition the student is required to complete one (1) more course from the following set: PHZ 5307, PHZ 5355, PHZ 5492, PHZ 5669, or PHZ 5716. 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

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 material covered at the advanced undergraduate level; 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-three (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 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 all six graduate level courses with a cumulative grade average of no less than "B;" 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, Florida State University, Tallahassee, FL 32306*.

Definition of Prefixes

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 5157. Advanced Numerical Applications in Physics (3). Prerequisites: PHY 4151C, 4604. Course consists of an introduction to a variety of numerical techniques for the solution of differential equations (D.E.) as well as an exploration of some of the power behind Monte Carlo (M.C.) methods.

PHY 5226. Intermediate Mechanics (3). The principles and applications of the Newtonian mechanics of particles and systems of particles. Non-inertial reference frames, simple and damped harmonic motion, central force motion, and the motion of a rigid body in a plane.

PHY 5227. Advanced Mechanics (3). Prerequisites: PHY 3221 or 5226 or its equivalent. Kinematics and dynamics of rigid bodies. An introduction to Lagrangian and Hamiltonian mechanics. The dynamics of oscillating systems.

PHY 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 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; continuous groups and Lie algebras; SU(2) and angular momentum; SU(3) flavor and color; SU(N) Lie algebras and examples.

PHY 5667. Quantum Field Theory (3). Prerequisites: PHY 5645 and 5646, or 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 gauge theories and the Standard Model.

PHY 5670. Quantum Many-body Physics (3). Prerequisites: PHY 5246, 5346, 5524, 5645, 5646. This course examines quantum many-body physics as applied to condensed matter, atomic, and nuclear physics.

PHY 5904r. Directed Individual Study (3). May be repeated to a maximum of thirty-six (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 (0-5). (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 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 labeled PHY 6938r may be scheduled. The exact content of each of these courses will depend on the interests and needs of the students and faculty. Proposals for special topics courses will be submitted by individual faculty members to the Graduate Affairs Committee three months prior to the scheduling of these courses. Student or faculty groups are encouraged to approach an appropriate faculty member and persuade him or her to submit a proposal for a course they feel is needed. The following titles reflect potential offerings: Models and Reactions in Nuclear Physics, Experimental Methods in Nuclear Physics, Theoretical Nuclear Physics, Intermediate Energy Nuclear Physics, Quantum Field Theory, Phenomenological Theories in Particle Physics, Experimental Methods in Particle Physics, Solid State Theory, Theory of Magnetism, Advanced Quantum Mechanics, Molecular Quantum Mechanics, Advanced Statistical Physics, Atomic Structure, Theory of Infrared Spectra, Electron and Atom Collisions, Molecular Collisions, General Relativity and Cosmology, Astrophysics, Magnetic Resonance. May be repeated to a maximum of eighteen (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). (P/F grade only.)

PHY 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

PHY 8976r. Master's Thesis Defense (0). (P/F grade only.)

PHY 8985r. Dissertation Defense (0). (P/F grade only.)

PHZ 5156C. Computational Physics Laboratory (3). Prerequisites: COP 2000; MAP 3305; PHY 4222 or 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). Prerequisites: PHY 5226, 5326. This course examines the following topics: special theory of relativity, tensor analysis and curvature, general theory of relativity, experimental tests, black holes, gravitational radiation, and cosmology.

PHZ 5715. Biophysics I (3). Physical bases of biological systems and biological processes, basic theories of thermodynamics and kinetics, key experimental techniques, simple physical models, realistic molecular modeling.

PHZ 5716. Biophysics II (3). Prerequisite: PHZ 5715. Selected topics in modern molecular biophysics, modeling and simulations of macromolecules, molecules as classical systems, molecular dynamics simulations, free energy calculations, molecular mechanics/quantum mechanics methods.

PHYSIOLOGY:
see Biological Science; Medicine; Nursing

**Department of
POLITICAL SCIENCE**

COLLEGE OF SOCIAL SCIENCES

Chair: Dale L. Smith; **Professors:** Barrilleaux, Berry, Crew, Kim, Moore, Scholz, C. Weissert, W. Weissert; **Associate Professors:** Claggett, Hensel, Jackson, Kemp, Smith; **Assistant Professors:** Ahn, Barabas, Block, Ehrlich, M. Golder, S. Golder, Jerit, Kemahlioglu, Maestas, Reenock, Siegel, Souva, Staton, Stokes-Brown; **Professors Emeriti:** Atkins, Bone, Dye, Flanagan, Glick, Gray, Palmer, Roady, St. Angelo, Vanderoef; **Affiliated Faculty:** Feiock, Metcalf

The Department of Political Science offers graduate programs leading to the master of science (MS) and doctor of philosophy (PhD) degrees. Instruction is offered in the following fields: American politics, comparative politics, international relations, public policy, methods of political analysis, and formal theory.

Admission

Students pursuing a 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 applicant's 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 non-thesis 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) total hours 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 department's major fields: American politics, public policy, comparative politics, and international relations. All master's candidates must take six (6) semester hours of methodology. The department's POS 5736 and 5737 are required for those continuing on to a PhD. Those in a terminal master's program may substitute PAD 5700 and 5701 offered in the School of Public Administration and Policy.

Major in Applied American Politics and Policy

Students can also fulfill requirements for a master's degree by undertaking the applied American politics and policy curriculum, designed for students interested in training for careers in political and governmental organizations that relate to public policy and active politics. This is a thirty-seven (37) semester hour, 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 programs of study by selecting one major and two minor fields.

Course work requirements typically add up to fifty-four (54) semester hours: twenty-four (24) semester hours in two major fields, including the advanced research seminar in each; eighteen (18) semester hours in required methods and research courses; and twelve (12) semester hours of electives, including at least one (1) core seminar outside the two major fields.

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—Sociology of Demography/Area Studies/Sociological Minorities

Graduate Courses

Comparative Politics

CPO 5091. Core Seminar in Comparative Government and Politics (3). This core seminar offers a broad survey of the comparative field to familiarize the student with the scope and variety of approaches, theories, methods, and findings associated with comparative politics, including both the classics in the field and the most recent new research directions.

CPO 5127. Seminar in Comparative Government and Politics: Great Britain (3). An investigation and analysis of the major institutions and processes of British government and politics. Comparison and contrast with the political and governmental system of the United States is emphasized.

CPO 5407. Seminar in Comparative Government and Politics: The Middle East (3). Covers the political systems of the Middle East and their social, economic, and cultural foundations.

CPO 5740. Comparative Political Economy (3). This course deals with the interaction between politics and economics (or politicians and economists) in the formulation and implementation of national economic policies. The course is theoretical and empirical in orientation.

CPO 5934r. Selected Topics (3). Varies with instructor and semester. May be repeated to a maximum of nine (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 5088. International Conflict (3). Undertakes a comprehensive review of the theory and research on international conflict. A wide range of traditional theories on the causes of war are examined as are a number of topics such as deterrence theory, theories of coercive diplomacy, and the question of the utility of force in the nuclear age.

INR 5137. Politics of Terror (3). This course explores terror and foreign policy with particular emphasis on U.S. foreign policy since September 11, 2001.

INR 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 5127. State Government and Politics (3). A comparative analysis of the organization and behavior of major political actors, institutions, and policies in the 50 states. Topics include state constitutions, federalism, political participation, political parties, interest groups, legislatures, courts, governors and administration, and analysis of various policies such as education, welfare, transportation, environmental protection, and civil rights.

POS 5208r. Selected Topics in Political Behavior (3). Varies with instructor and semester. May be repeated to a maximum of nine (9) semester hours.

POS 5237. Seminar in American Government and Public Policy: Public Opinion (3). An introduction to public opinion theory and methodology, with special attention paid to public opinion on policy issues and the role of public opinion in the policy-making process. Practical experience in survey research is provided through the design and execution of a class opinion survey on some policy issue.

POS 5277. Electoral Politics (3). A survey of the research literature on political participation, voting behavior, and the impact of elections on government and policy. Primary emphasis is on recent American politics, but comparative and historical dimensions of electoral politics are explored as well.

POS 5287. Seminar in American Government and Public Policy: Judicial Politics (3). Emphasis is on courts as political institutions. Analysis covers the behavior of courts from the U.S. Supreme Court to local small claims courts and the links between courts and society. Topics include court organization, judicial administration and court reform, politics of judicial selection, settlement of civil and criminal cases, plea bargaining, judicial decision making, judicial policy, and the implementation of judicial policy.

POS 5427. Legislative Politics (3). The behavior of legislators and the influences that shape that behavior in the legislative process.

POS 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 5698r. Selected Topics (3). Varies with instructor and semester. May be repeated to a maximum of nine (9) semester hours.

POS 6910. Advanced Research in American Government (3). Prerequisite: POS 5746. Students discuss strategies for research in American government and design and implement a research project relating to the specific topic of the course. Specific topic varies.

Methods of Political Analysis

POS 5723r. Game Theory (3). The purpose of this seminar is to survey game theory with a specific emphasis on utilizing those mathematical models to understand political phenomena. Thus, there will be a dual focus on tools and exemplary applications. May be repeated to a maximum of six (6) semester hours.

POS 5727r. Advanced Game Theory (3). Prerequisite: POS 5723 or instructor permission. This course addresses various models of games, including incomplete information, signaling games, bargaining models, repeated games, cheap talk models, evolutionary game theory, and behavioral/experimental game theory. This course assumes some knowledge of calculus and probability and distribution theories. May be repeated to a maximum of six (6) semester hours.

POS 5736r. Research Design (3). Acquaints students with the basic processes involved in the conduct of research. Students are expected to apply these processes in the examination of a research problem of their own design. May be repeated to a maximum of six (6) semester hours.

POS 5737r. 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. May be repeated to a maximum of six (6) semester hours.

POS 5746r. 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. May be repeated to a maximum of six (6) semester hours.

POS 5747r. 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 non-recursive structural equation models, factor analysis and covariance structure models, and methods for time-series analysis. May be repeated to a maximum of six (6) semester hours.

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 5015. Comparative Public Policy (3). This course provides an understanding of the political, economic, and social contexts of policy-making across nations. The course considers relevant theoretical and methodological approaches to cross-national policy research.

PUP 5607. Politics of Health Policy (3). This course examines the processes and institutions that make health policy in the United States. Policy analysis is emphasized, with a focus on the current health policy agenda, solution options, and their politics and prospects.

PUP 5932r. Selected Topics (3). Topics vary. May be repeated to a maximum of nine (9) semester hours.

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 nine (9) semester hours.

POS 5915. 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 5919r. Supervised Research (1-5).** (S/U grade only.) Only three (3) hours may apply toward 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).** (P/F grade only.)
- POS 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- POS 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- POS 8985r. Dissertation Defense (0).** (P/F grade only.)
- SYD 5145. Population Policy (3).** Also offered by the Department of Sociology. See description in the "Sociology" chapter of this *Graduate Bulletin*.

Applied American Politics and Policy

- POS 5085. Governmental Relations for Business (3).** This course focuses on the activities employed by corporations pertaining to public affairs or governmental relations. The objective of the course is to provide students with a practical understanding of this component of business and how this function is developed, managed, and evaluated.
- POS 5096. Political Fund-raising (3).** This course examines financial rules and laws, organization of fund-raising, event planning, direct marketing, and other topics. The purpose is to provide students with knowledge and skills that will enable them to successfully direct fund-raising efforts.
- POS 5203. Fundamentals of Political Management (3).** This course is designed to provide basic knowledge about and a common framework for understanding contemporary American politics. Topics include the political system, political industries and underlying political beliefs.
- POS 5274. The Campaign Process (3).** A theoretical and practical approach to campaign planning and administration for persons seeking relevant active political careers or academic specializations.
- POS 5276. Political Communication and Message Development (3).** This course introduces students to the specialized forms of communication used by political professionals. Students learn how to produce strategically sound and rhetorically powerful messages for electoral campaigns, policy campaigns, and crisis situations, as well as how to evaluate the message of others.
- POS 5335. Political Research (3).** This course is designed to prepare students to use research techniques and strategies. Students learn how to understand political situations and how to exploit these situations to the client's advantage. Topics include data resources and collection, statistical analysis and utilization, opposition research, and campaign strategy.
- POS 5465. Lobbying (3).** This course concentrates on the fundamentals of lobbying, including strategy and tactics. Students learn how to lobby the executive branch and the legislature, state and local governments and foreign governments. The course concentrates on lobbying the budget process, lobbying strategies, and the management of government affairs in corporations and trade associations.
- POS 5905. Applied Program Planning (1).** (S/U grade only.) In consultation with the program director, the student creates a course work and internship/practicum plan for the major in applied American politics and policy.
- POS 5945r. Professional Practicum/Internship (3-12).** This course is designed to provide a structured opportunity for students to gain practical experience in the field of political management. Students spend 300 hours in an activity appropriate for the profession of political management and produce a descriptive and analytical product paper. May be repeated to a maximum of twelve (12) semester hours; majors are required to complete successfully the maximum.

POLITICAL THEORY:
see Political Science

POPULATION:
see Demography; Sociology

PORTUGUESE:
see Modern Languages and Linguistics

PROCESS BIOLOGY:
see Biological Science

PROGRAM EVALUATION:
see Educational Psychology and Learning Systems

PSYCHOBIOLOGY/NEUROSCIENCE
see Biological Science; Neuroscience; Psychology

Department of PSYCHOLOGY

COLLEGE OF ARTS AND SCIENCES

Chair: Janet A. Kistner; **Associate Chair:** Berler; **Professors:** Bailey, Baumeister, Berkley, Carbonell, Charness, Contreras, Ericsson, Glendenning, Hull, Hyson, Joiner, Kistner, Lang, Lonigan, Madsen, Schmidt, Spector, Tice, Torgesen, Wagner, Wang, Zwaan; **Associate Professors:** Boroto, Eckel, J. Johnson, Kelley, B. Licht, M. Licht, Meyer, Plant, Schatschneider; **Assistant Professors:** Bolaños, Ehrlinger, Kaschak, Loney, Maner, Taylor, Ward; **Research Associates in Psychology:** Akbar, Berler, Henderson, Sachs-Ericsson, Warmath; **Associates in Psychology:** Kline, Murphy; **Assistants in Psychology:** Lane, Weil; **Administrative and Professional:** Bigbie, Donaldson, Harris, Saunders; **Associated Faculty:** Davis, Ferris, Kerr, Kemper, O'Kon, Patrick, C. Rashotte, K. Schmidt, Sullivan, Tenenbaum; **Professors Emeriti:** Brigham, Hokanson, Kennedy, Kenshalo, Megargee, Miller, Rashotte, Smith, Stephan, Weaver

The primary goal of graduate study in psychology at Florida State University is to produce scholars with sufficient breadth and depth to permit independent and significant research. While the major emphasis is on the preparation for research, students are also given the necessary background for teaching and/or application of psychological science. Only students whose intentions are to achieve the doctoral degree during full-time study are accepted for the graduate programs in psychology.

Research opportunities are abundant in the Department of Psychology. Faculty members attract a high level of research grant support from federal and state agencies, including the National Institutes of Health and the National Science Foundation. Total funding on an annual basis currently approximates \$6,000,000.

Information about the Department of Psychology, its graduate programs and faculty is available on the World Wide Web: <http://www.psy.fsu.edu>.

Facilities

The Psychology Department moved into Phase I of its new state-of-the-art building complex in August 2006. When Phase II is complete in 2008, the new complex will consist of three connecting wings, each four stories tall, and a separate 220-seat auditorium. It will feature over 40 research laboratories, wireless communication, a spacious courtyard, a clinical training and research clinic, a center for studies in reading, a neuroscience research center and state-of-the-art vivarium, and undergraduate and graduate student computer rooms, incorporating the entire department into a single home. Visit our Web site at <http://www.psy.fsu.edu> for more details.

The Department's technical staff and support facilities are some of the best in the country. The facilities are operated by experts in biomedical, electrical, and structural engineering, computer hardware and software support, and graphics design and include fully equipped computer, electronic, machine, graphics and instrument design shops. Instruction in behavioral, physiological, and neuroanatomical techniques is provided both in formal course work and in laboratory settings. A molecular neuroscience laboratory provides equipment and training for studies of gene cloning and gene expression, as well as techniques to measure levels of hormones and neurotransmitters.

The department administers an on-campus psychology clinic that offers outpatient assessment and therapy services to members of the Tallahassee community and surrounding areas. This facility provides excellent clinical and research training for clinical students, who render services under close supervision of clinical faculty.

Financial Aid

The Department of Psychology makes every effort to provide financial assistance, including stipends and tuition waivers, for graduate students in good standing in the department. Students who request financial assistance typically receive some kind of support throughout their graduate education. Sources of funding include the following: fellowships, teaching assistantships, research assistantships, departmental assistantships, minority program fellowships, and community agency placements.

Doctoral Programs

The Department of Psychology is organized into five specialized programs for graduate instruction that reflect the mainstream emphases in the field. The programs are in clinical psychology (the assessment, treatment, and study of the determinants of pathological behavior in children and adults with emphasis on biological, cognitive, and environmental factors), cognitive psychology (the study of how humans process complex information received by the senses), developmental psychology (the study of physical, cognitive, and social change throughout the life span), neuroscience (the study of the biological bases of behavior), and social psychology (the study of how we think about, influence, and relate to one another).

Clinical Psychology

The PhD program in clinical psychology has been continuously accredited by the American Psychological Association since 1954 (*APA Office of Program Consultation and Accreditation, 750 First Street, NE, Washington, DC 20002-4242, 202-336-5979*). Based on a clinical science model, the PhD program in Clinical Psychology promotes a scientifically-based approach to understanding, assessing, and ameliorating cognitive, emotional, behavioral, and health problems and seeks to produce students who can contribute to and apply the relevant scientific knowledge. We provide concurrent, integrative training in clinical science and clinical service delivery so that our graduates are prepared not only to apply current knowledge, theories, and techniques, but are able and motivated to remain at the cutting edge of the field.

All students are expected to master the basics of psychology in general and of clinical psychology in particular. This is accomplished primarily through a curriculum of required courses taught by both clinical and non-clinical faculty. We consider students' exposure to our first-rate neuroscience, cognitive, developmental, and social psychology faculty, in addition to our clinical faculty, to be one of our program's strengths. Although there are no formal "tracks," students can pursue specialization beyond the required courses through focused activities in research, advanced course work, and clinical practice.

The program conforms to a mentorship training model. Students are accepted into the graduate program in part based on the match between their interests and those of our clinical faculty. Since research is a cornerstone of a good clinical science program, students work closely on research with the faculty mentor who recruited them starting in their very first semester. They are further encouraged to be continuously involved in ongoing research throughout their tenure in our program and it is common for some to pursue collaborations not only with their mentors, but also with other clinical and non-clinical faculty, and with fellow graduate students as well.

Our commitment to clinical science leads us to integrate clinical practice and science at every opportunity. We administer our own Psychology Clinic and newly established Anxiety & Behavioral Health Clinic. These clinics provide state-of-the-science treatment to the community while simultaneously serving as clinical training and research venues for our graduate students and faculty. Our Psychology Clinic has been recognized by APA for Innovative Practices in Graduate Education in Psychology for its accomplishments in integrating training in service and science. Additional clinical training/research opportunities are available at practicum sites in the community. Finally, students complete a required one-year pre-doctoral internship at an APA approved setting. Our students have established a long history of success in competition for preferred internships across the country.

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 course work, 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 course work 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 such as perception, attention, memory, language processing, and thinking. We have active research programs in attention, cognitive aging, expert performance, memory, psycholinguistics, reading and skill acquisition. Our aim is to help graduates gain skills and a publication record that will make them competitive for jobs as researchers and educators in universities and colleges, in government, and in private consulting firms.

Graduate training in the cognitive program is a system of mentorship by the graduate adviser, typically the same professor who recruited the student into the program. Research begins in the first year and involves close collaboration with the graduate adviser. Graduate students gradually take on a more central role in the research, culminating in the dissertation. There are opportunities for students to collaborate with other faculty to gain broader research experience.

The research interests of the faculty span the breadth of cognitive psychology and provide many different areas for graduate training. One focus is on expert performance and skill acquisition, work that challenges the idea that skilled athletes, musicians, and chess players are born with special abilities, and instead points to the remarkable effects of training and practice. A second focus aims to specify key components of reading acquisition in order to identify and prevent reading disabilities. A third focus is on language processing, from the acquisition of syntactic structures to the formation of models of the situation conveyed by a text. Several language researchers explore embodied cognition, which postulates a close link between perception, action, and cognitive representations. Other researchers focus on age-related changes in memory functioning, discourse, and skills. Another group studies memory, including the mechanisms that create false memories, memory monitoring, effects of addictive urges on working memory, autobiographical memory, and the cognitive neuroscience of memory for faces. Other researchers study key processes of executive control and attention in cognition using event-related potentials. The laboratories that support these research programs are well equipped with computer testing stations and systems to track eye movements during cognition.

The **Florida Center for Reading Research** (<http://www.fcrr.org>) 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.

Developmental Psychology

Developmental psychology is the study of the processes by which humans develop and potentially lose competencies in domains ranging from sensation and perception to personality. Developmental psychology as a field of study is growing, as new methods of study have developed, and as the realization that just about any picture of human functioning is but a snapshot of an ongoing process of change. Developmental

psychology is an integrative discipline that has implications for other areas of psychology including cognitive psychology, neuroscience, social psychology, and clinical psychology.

Students in developmental psychology receive in-depth training with opportunities for both basic and applied research. The goal of the program is to prepare students for future positions as professors in universities and colleges, researchers in government and private-sector laboratories, and as educators. The program is guided by the view that the best way to become a researcher is to carry out research, so continuous involvement in research projects is stressed. The curriculum has core course requirements, but maximizes opportunities for specific seminars and individual research opportunities that fit a training program designed by the student and his or her major professor. Students also are encouraged to develop competencies that will broaden their job prospects beyond the university and research laboratory settings. Examples include program evaluation, test development, and data analysis.

The Florida Center for Reading Research provides exciting opportunities for basic and applied research in reading. Please visit <http://www.fcrr.org> for more information.

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. Course work 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 Social Psychology program's faculty provide several possible directions for interested graduate students to pursue. Some of the work done here focuses on self and identity, including issues of self-control, self-knowledge, self-deception and defense mechanisms, self-presentation and impression management, and how the self operates in social interactions. There is also research on how people respond to blows to their pride or "threatened egotism," including effects on decision-making and on aggressive responses. Another line of work emphasizes the "need to belong" as a basic motivation, including studying what happens when people are rejected or excluded. Emotion is another focus of study, including issues of how emotions affect decision-making and how people seek to control or stabilize their emotional states. Other work focuses on prejudice and stereotyping, examining the factors that lead to anxiety in interracial interactions and that may result in the avoidance of interracial contact. Related work explores the prejudice reduction process and the implications of race for responses to criminal suspects. Several other lines of research apply evolutionary perspectives to topics including prejudice, romantic relationships, and prosocial/altruistic behavior. This work focuses on how people's motives and emotions influence whom they pay attention to, whom they remember, and how they evaluate others. Some of this work also examines motives leading people to help others, take risks, and behave aggressively or competitively. Performance under pressure, including what causes people to choke under pressure, is also an ongoing area of research. Last, there is some research on the social aspects of sexual behavior. Students may specialize in one research area but are encouraged to work in several in order to broaden their experience.

Interdisciplinary Program in Neuroscience

The doctoral program in neuroscience offers students broad training in brain and behavior research. Areas of emphasis include sensory processes (with special focus on the chemical, auditory, and pain senses), neural development and plasticity, circadian rhythms, behavioral and molecular genetics, regulation of energy balance and hormonal control of behavior. Interdisciplinary training is encouraged, and short-

term lab rotations are offered in the labs of the neuroscience faculty in Psychology; Biological Science; Mathematics; Nutrition, Food, and Exercise Sciences; and the College of Medicine. Training in molecular, system level and behavioral aspects of neuroscience are available, including courses in neuroanatomy, mammalian physiology, biochemistry, behavior, computer science and statistics. Exceptionally well-equipped facilities for instruction and research are a hallmark of the program. An active colloquium series in the neurosciences, and special topics courses, bring students into contact with leaders in the field from other universities. Supervised teaching of laboratory sections or, for advanced graduate students, teaching of lecture courses is encouraged. In route to the doctoral degree in Neuroscience, students may pursue a master's degree in psychology with a major in psychobiology with the approval of the faculty supervisor and training committee. For more information, see the separate entry "Interdisciplinary Program in Neuroscience" in this *Graduate Bulletin* and the program in neuroscience Web site at <http://www.neuro.fsu.edu>.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Admissions

New students are accepted for enrollment only in the fall semester of each year. Completed applications are due between December 1st and January 5th, depending on the program. Applicants should contact the department for deadlines.

Applicants must satisfy all admission requirements and policies set by the department and University. Admission to graduate study is based upon a combination of factors, including undergraduate and graduate grade point average, Graduate Record Examination scores, letters of recommendation from former professors, prior experience, and the applicant's personal statement. Students who have demonstrated an interest in research prior to applying to the doctoral programs will be given priority.

Departmental Degree Requirements

The general requirements of the department are kept to a minimum in order to encourage students to be educated in accordance with each program area's own interests and goals, as well as those of the students. The basic requirements are outlined below; these and other requirements are more completely described in the department's *Guidelines for the Operation of the Doctoral Programs*.

Predocutorial Program

Core Curriculum

Students complete one advanced statistics course. In addition, a basic statistics course is required if the student has not previously taken an introductory statistics course.

Research Apprenticeship

First-year students work 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.

Note: Most program areas require completion of the master's degree prior to entry to the doctoral program.

Doctoral Program

With the approval of the pre-doctoral supervisory committee, students formally enter the doctoral program. Students with master's degrees from other institutions enter the doctoral program after they have completed the departmental core curriculum, and after their previous

graduate work and empirical theses have been evaluated and approved by the faculty. The following are required for the doctoral degree after students are admitted to the doctoral program:

1. Two (2) of the following core courses: DEP 5165; EXP 5406, 5508; PPE 5055; PSB 5056, 5341, or PCB 5845; PSB 6059 (Behavioral Endocrinology); PSY 6919 (Cross-Area Seminar, or Personality and Social Psychology); and SOP 5053
2. A written preliminary doctoral examination or a theoretical/critical literature review paper plus oral exam
3. A dissertation research project

Program Area Requirements

Program areas have minimum requirements beyond those established for the department; these must be completed prior to the doctoral degree and a time sequence is specified for some requirements. In addition, students work closely with their supervisory committees to develop an optimum combination of course work, research experience, and applied training to meet their professional goals. Program requirements are reviewed periodically by the faculty and may change.

Clinical Psychology Program

Clinical psychology students are required to obtain a master's degree. 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.

1. **General Core.** Students must take PSB 5056; DEP 5165; either EXP 5406 or 5508; and SOP 5053 and PPE 5055, or PSY 6919 (Personality and Social Psychology).
2. **Background.** PSY 5605
3. **Determinants of Abnormal Behavior.** CLP 6169 and 5475
4. **Research Methodology.** CLP 5375; EDF 5401 or equivalent (satisfies departmental core requirement) plus one additional statistics course
5. **Assessment.** PSY 5325
6. **Behavior Change.** CLP 5196 and 5475
7. **Professional Ethics.** CLP 5624 and 6920. 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. **Proseminar.** CLP 6920 (required every semester for clinical students in residence)
9. **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.
10. **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.
11. **Internship.** PSY 6948.

Cognitive Psychology Program

1. **Psychology Content Core.** EXP 5508; one of the following courses: DEP 5165, EXP 5406, PPE 5055, SOP 5053, PSB 6059 (behavioral endocrinology), PSY 6919 (cross-area seminar) or PSB 5056, PSB 5341, or PCB 5845; EXP 6920; and four (4) advanced courses other than those listed previously as part of the content core
2. **Research/Experiential Core.** Master's thesis (PSY 5973r); PSY 5917r; PSY 6656r; PSY 6980r
3. **Statistics/Methodology Core.** Students select three (3) statistics courses from a list of designated courses.

Developmental Psychology Program

1. **Psychology Content Core.** DEP 5165; one of the following courses: EXP 5406, EXP 5508, PPE 5055, SOP 5053, PSB 6059 (behavioral endocrinology), PSY 6919 (cross-area seminar) or PSB 5056, PSB 5341, or PCB 5845; and four (4) advanced courses other than those listed previously as part of the content core
2. **Research/Experiential Core.** Master's thesis (PSY 5973r); PSY 5917r; PSY 6656r; PSY 6980r
3. **Statistics/Methodology Core.** Students select three (3) statistics courses from a list of designated courses.

Social Psychology Program

1. **Psychology Content Core.** SOP 5053 or PSY 6919 (Personality and Social Psychology); one of the following courses: DEP 5165, EXP 5406, EXP 5508, PPE 5055, PSB 6059 (behavioral endocrinology), PSY 6919 (cross-area seminar) or PSB 5056, PSB 5341, or PCB 5845; SOP 6920; and four (4) advanced courses other than those listed previously as part of the content core
2. **Research/Experiential Core.** Master's thesis (PSY 5973r); PSY 5917r; PSY 6656r; PSY 6980r
3. **Statistics/Methodology Core.** Students select three (3) statistics courses from a list of designated courses.

Interdisciplinary Program in Neuroscience

1. **Required Courses.** PCB 5845; PSB 5341; PSB 5231L; PSB 5057; PSB 5077; PSY 5908r (2 sections); PSB 6070r; PSB 6920r; PSB 6933r
2. **Core Electives.** One (1) course from a Physiology Cluster of designated courses and one (1) course from a Behavioral Cluster of designated courses
3. **Research Presentations.** At least two (2) formal research presentations in addition to the dissertation defense
4. **Teaching.** Two (2) semesters of teaching experience

Master's Degree in Psychology with a Specialty in Applied Behavior Analysis (Panama City Campus)

The Department of Psychology offers a separate master of science 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, 6130; PSB 5056; DEP 5165. This program may be completed in five (5) or 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, and applied behavior analysis. Prerequisite courses must have been passed with a grade of "B-" or better prior to matriculation into the program. Experience applying the principles of applied behavior analysis in a real-world setting is desirable.

Applicants must submit the following to be considered for admission to the master's program at Panama City:

1. Completed university and departmental application forms
2. Official GRE scores

3. Three letters of reference (a minimum of two should be from former professors)
4. A personal statement
5. Official transcripts of previous undergraduate and graduate course work

The application deadline is February 1st for Fall admission (the deadline should be confirmed with the department as it is subject to change.)

For further information about admission and degree requirements for the master's program in Panama City, contact the: *Graduate Office, Department of Psychology, 1107 W. Call Street, Florida State University, Tallahassee, FL 32306-4301; (850)-644-2499; grad-info@psy.fsu.edu*, or visit the Web site at <http://www.psy.fsu.edu>.

Definition of Prefixes

CLP—Clinical Psychology

CYP—Community Psychology

DEP—Developmental Psychology

EAB—Experimental Analysis of Behavior

EXP—Experimental Psychology

PCB—Process Biology

PPE—Personality

PSB—Psychobiology

PSY—Psychology

SOP—Social 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 6130r. Seminar on Skinner's 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 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 Standards of Professional Practice (3). (S/U grade only.) Prerequisites: CLP 6169; 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 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.

PCB 5845. Cell and Molecular Neuroscience (4). Students are introduced to basic principles of neurophysiology, including intracellular signalling, membrane potentials, synaptic communication, sensory and motor systems, and neural development and plasticity.

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 twenty-four (24) 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). Students may register for a maximum of two (2) sections within the same semester. Course may be repeated to a total of twelve (12) 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). (P/F grade only.)

PSY 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

PSY 8976r. Master's Thesis Defense (0). (P/F grade only.)

PSY 8985r. Dissertation Defense (0). (P/F grade only.)

**PSYCHOLOGY FOR COUNSELING:
see Educational Psychology and Learning Systems**

Reubin O' D. Askew School of PUBLIC ADMINISTRATION AND POLICY

COLLEGE OF SOCIAL SCIENCES

Director: Frances S. Berry; **Professors:** Askew, Berry, Bowman, Bradley, deHaven-Smith, Feiock, Guy, Klay, Reid; **Associate Professors:** Brower, Coursey; **Assistant Professors:** McCreary, Wolfson, Yang; **Affiliate Faculty:** Imershein; **Visiting Professors and Adjunct Faculty:** Crispo, Long, Lynch, Parry, Rosenzweig, Shane, Sheffield; **Professors Emeriti:** Chackerian, 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 non-profit 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 College of Social Work (master of public administration/master of social work [MPA/MSW]), the College of Criminology and Criminal Justice (master of public administration/master of science in criminology [MPA/MSC]), 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 School's 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 resume', and, where relevant, evidence of prior professional work experience. A small number of exceptions to the University admission standards are possible for students possessing exceptional qualifications not reflected in criteria normally used for admission. For further information concerning admission exceptions, consult either the *MPA Student Handbook* (available online or from the school) or the MPA Director.

The MPA requires successful completion of forty-two (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:

- Local government
- Leadership and strategic management
- Human resource management
- Public budgeting and financial management
- Public information management
- Policy analysis and evaluation management
- Health services administration and policy
- Emergency and environmental management
- Not-for-profit management

These programs are more fully described in the *MPA Student Handbook*.

Graduate Certificates

The certificate programs are designed to accommodate the special needs of practicing administrators and working students. There is no minimum number of courses to be taken in any term and no limit on the amount of time one takes to complete a certificate. Continuous registration is not required. All graduate certificates require a 3.0 grade point average.

The certificates are also available to MPA students who wish to pursue a specialization in financial management, human resource management, or health services administration as a part of their degree 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 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 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

Graduate Courses

PAD 5035. Policy Development and Administration (3). Prerequisites: PAD 5700, 5701, and 5050, or equivalents. This course seeks to enhance the student's ability to analyze, research, and develop public policies.

PAD 5041. Public Service Ethics (3). Ethics in government focuses on the quality of public service; as such, it is core to the field of public administration. A professional is a professional not simply because of expertise, but also because of adherence to ethical standards. This course provides maps and tools to make moral experiences more explicit and consistent so students can chart their own way. Individual decision-making strategies and organizational programs to address challenges are explored. Case studies of managers who confront ethical dilemmas as well as management issues such as workforce diversity and quality improvement complement this material.

PAD 5050. The Profession of Public Administration (3). An overview of the intellectual heritage of public administration and its central issues. The student will learn key managerial skills and major sources of information for professional research.

PAD 5106. Public Organizations (3). Elements of micro and macro organizational analysis. Includes organization theory, structure and design, power and conflict, motivation, leadership, group behavior, organizational effectiveness, and development.

PAD 5227. Managing Public Financial Resources (3). Public budgeting and related financial management processes at the federal, state, and local levels with some emphasis upon those in Florida. The evolution of budgeting in the U.S. and major financial functions including an introduction to governmental accounting.

PAD 5275. Political Economy of Public Administration (3). Prerequisites: PAD 5700, 5701 or equivalents. Application of economic analysis to public bureaucracy and comparison of public and private management. Topics include public and private sector organizations, economic development, privatization, and public entrepreneurship.

PAD 5327. Public Program Evaluation (3). Prerequisites: PAD 5700 and 5701, or equivalents. Introduction to problems of public program evaluation methods and strategies for administrative implementation.

PAD 5335. Strategic Leadership for Communities (3). This course will teach the principles and skills of strategically managing agencies and communities. Strategic planning, community visioning, and organizational assessments will be covered. Managerial leadership roles and responsibilities in organizing community planning and change also will be covered.

PAD 5397. Foundations of Emergency Management (3). This course is designed to introduce students to the fundamental concepts, theories, principles and practices of emergency management.

PAD 5398. Emergency Management Programs, Planning, and Policy (3). This course examines functional demands that emergency managers should be aware of in crafting emergency management policies and programs. Students explore how public policy choices impact emergency planning and the consequences of a disaster event.

PAD 5417. Human Resource Management (3). Survey of philosophy, approaches, and systems of managing people in government. Includes historical developments, personnel management practices and behaviors, and current issues. Examines recruitment, classification, compensation training, evaluation functions, and equal employment opportunity and labor management policies.

PAD 5419. Issues in Human Resource Management (3). Prerequisite: PAD 5417 or equivalent. Contemporary and enduring issues in field, and techniques on how to deal with them, are examined. Illustrative topics include AIDS, dissent, workforce quality, drug testing, child/elder care, video display terminals, smoking, self-managing teams, white collar crime, wellness programs, compensation, sexual harassment at the workplace.

PAD 5427. Public Labor Relations (3). Institutional theory and behavior in government labor relations. Public policy implications, differences from the private sector, evolution of public unions, scope and practices with emphasis upon Florida.

PAD 5457. Quality Management Systems (3). This course addresses the theory, design, and implementation of quality management systems in public organizations compared to those in other sectors of the economy. It examines the need for, and origins of, quality management philosophies, techniques, transition strategies, case studies and additional scenarios.

PAD 5605. Administrative Law (3). Legal ideas and frameworks conditioning the administrator, liability, disclosing information, rulemaking, policy change, discretion, investigation, and adjudication. Model State Administrative Procedure Act.

PAD 5700. Research Design in Public Administration (3). Fundamental concepts and techniques in research design, problem formulation, execution, and analysis, stressing applications in public policy. Includes measurement, statistics.

PAD 5700L. Research Design Laboratory (0). (S/U grade only.) Laboratory linked to and required of all students in PAD 5700. Instruction in computer techniques, in-class statistics and methods exercises, supplementary lecture material.

PAD 5701. Quantitative Analysis in Public Administration (3). Prerequisite: PAD 5700 or equivalent. Application of quantitative analysis to problems of public policy and management. Quasi and experimental designs for evaluation of social programs, computer analysis of data sets.

PAD 5701L. Quantitative Analysis in Public Administration Laboratory (0). (S/U grade only.) Prerequisites: PAD 5700, 5700L. Laboratory linked to and required of all students in PAD 5701. Intensive instruction in computer techniques, in-class exercises in statistical techniques and methods, supplementary lecture material.

PAD 5710. Information Resource and Communication Management (3). This course in communication, information resource management and information technologies is aimed at administrators in the public and not-for-profit sectors. It deals with basics of information technologies; organizational and other communications or information exchange networks; the interaction of government and non-profits with clients, citizens, other agencies or institutions; and the virtual state.

PAD 5826. Intergovernmental Management and Relations (3). The role of the public administrator in developing and administering public policy within the system of federal, state, and local governments. Includes legal, financial, administrative issues as well as substantive areas such as social services, health, employment, education, and housing.

PAD 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 5859. Contract Management: History, Issues, and Practices (3). This course examines the historical context of contracts, related managerial practices and salient issues pertaining to contracting for government services. Topics include contracting issues at the federal, state and local government levels; the elements required for an enforceable contract and the obligations of contracts; key terms and key concepts related to contracts.

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 includes 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 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 ensure student attendance at a series of professionally oriented events. Doctoral students are required to attend these events over four semesters.

PAD 6960r. Preliminary Examination Self-Study (0-12). (S/U grade only.) Provides time for informal interaction with faculty to study for preliminary doctoral examination. May be repeated to a maximum of twelve (12) semester hours.

PAD 6980. Dissertation (1-12). (S/U grade only.)

PAD 8964. Preliminary Doctoral Examination (0). (P/F grade only.) For students registering to take their doctoral examination.

PAD 8985. Dissertation Defense (0). (P/F grade only.)

PUBLIC POLICY:
see Political Science

PUBLIC RELATIONS:
see Communication

QUANTITATIVE METHODS/BUSINESS:
see Management Information Systems; Statistics

RADIO, TELEVISION:
see Communication

READING AND LANGUAGE ARTS:
see Childhood Education, Reading, and Disability Services

**RECREATION AND LEISURE SERVICES
ADMINISTRATION:**
see Sport Management, Recreation Management, and
Physical Education

REHABILITATION COUNSELING:
see Childhood Education, Reading, and Disability Services

Interdisciplinary Program in PUBLIC HEALTH

Director: William G. Weissert; **Faculty:** Jason Barabas, Chris Coutts, Jason Jordan, Lisa Jordan

The College of Social Sciences offers the interdisciplinary Master's of Public Health (MPH).

MPH degree graduates are trained principally as health administrators and health policy analysts. They acquire a rich background in epidemiology, health economics, health behavior, health administration, health policy and policy analysis, and statistical and qualitative analytic skills. Careers are likely to include government agency or legislative staff positions, policy and consulting firms, think tanks, advocacy organizations and lobbying firms, international organizations focused on health and population issues, academic, or media positions.

Requirements

Students must meet the University's general requirements for graduate admission and must be recommended by the program director. A baccalaureate degree from an accredited institution and a score from the general portion of the Graduate Record Examination are required. The minimum admission guidelines are for an undergraduate upper division grade point average of 3.0 or better and a minimum combined score of 1000 on the GRE. Higher attainment on one measure may offset lower attainment on another. These indicators are considered along with other evidence of preparation. For students whose native language is not English, a TOEFL score is required.

The program of study includes a set of required and elective courses. These are integral to the study of public health and considered by those in the field to provide a broad public health perspective.

Total Credits

A minimum of thirty-six (36) semester hours of academic credit is required for graduation (plus any required prerequisites) with a minimum of a 3.0 GPA. Please consult the department for a complete list of requirements.

Course Requirements for the Master's of Public Health

Required MPH core courses (thirty [30] semester hours):

ECP 5536	Seminar in Health Economics (3) or PAD 5935 Healthcare Finance (3);
HSC 5603	Models of Health Behavior;
HSC 5203	Public Health History, Philosophy and Policy (3);
HSC 5216	Environmental Health (3);
PAD 5106	Public Organizations (3) or PAD 5846 Health Policy and Public Administration (3) or PHC 5104 Public Health Management (3);
POS 5036	Health Regulation (3) or ISS 5930 Comparative Health Policy (3);
PUP 5607	Politics of Health Policy (3) or PUP 5932 Health Policy Analysis (3);
PUP 5932	Health Policy Statistics (3) or STA 5172 Statistics for Epidemiology (3);
SYD 5137	Fundamentals of Epidemiology (3) or ISS 5930 Public Health Epidemiology (3) or GEO 5934 Medical Geography;
PHC 5912	Public Health Capstone and Research Project (3) or GIS 5400 Geographic Information Systems Applications in Social Sciences

Approved MPH Electives (three to nine [3-9] semester hours):

GEO 5934	Medical Geography (3)
GIS 5400	Geographic Information Systems Applications in Social Sciences (3)
ISS 5930	Comparative Health Policy (3)
ISS 5930	Health and Poverty (3)
PAD 5397	Foundations of Emergency Management (3)
PAD 5846	Health Policy and Public Administration (3)
POS 5036	Health Regulation (3)
PUP 5932	Policy Analysis Methods (3)
SYA 6933	Epidemiology of Stress (3)
SYA 6936	Epidemiological Research Methods (3)
SYD 5136	Life Course Epidemiology (3)

Any advanced multivariate statistics course approved in advance

Additional Requirements

Internship (three [3] semester hours)

The purpose of the internship is to gain practical skills in the application of research methods in an approved health delivery or health policy setting. The 400-hour internship experience is evaluated by the preceptor in the health setting, the student, and the faculty adviser. In special instances, the internship requirement may be partially or fully waived with appropriately documented justification.

Capstone Project (hours included in core above)

All students will complete a major policy analysis paper on a topic of their own choosing in conjunction with PHC 5912, Public Health Capstone and Research Project or GIS 5400, Geographic Information Systems Applications in Social Sciences. The paper will draw upon earlier courses as well as the capstone course to provide a capstone experience.

Prerequisite Courses as needed (three to six [3-6] semester hours)

Some courses may require prerequisites for students deemed not adequately prepared to handle the course material. Prerequisite credits may not be counted toward core, elective or total credit requirements.

Substitutions

Courses drawn from various departments may be substituted for certain core and elective requirements including introductory research design, statistics, and advanced methods. Substitutions must be approved by the director or director's designee.

Definition of Prefixes

HSC—Health Sciences

PHC—Public Health Concentration

Graduate Courses

HSC 5203. Public Health History, Philosophy and Policy (3). This course provides an introductory overview of the history of public health. The philosophy and concepts basic to public health practice are addressed in depth. Basic skills related to health delivery in the U.S. and throughout the world are reviewed.

HSC 5216. Environmental Health (3). This course covers the science behind the basic elements of environmental health and its centrality to human health. It includes the basics of providing a pure water supply, sanitation of waste matters, and common field procedures needed for environmental surveillance.

PHC 5104. Public Health Management (3). This course provides the essentials basic to managing public health programs. Administrative content includes an overview of targeted programs, communications, and planning, budgeting, implementing, and evaluating public health programs.

PHC 5912. Public Health Capstone and Research Project (6). (S/U grade only.) This practical and research application course allows the student to integrate all knowledge gained in the core courses and apply that knowledge in a systematic way through an applied research project that is defended before two faculty.

Department of RELIGION

COLLEGE OF ARTS AND SCIENCES

Chair: John A. Corrigan; **Professors:** Corrigan, Kelsay, Porterfield, Tigchelaar, Twiss; **Associate Professors:** Cuevas, Erndl, Kavka, Levenson; **Assistant Professors:** Day, Gaiser, Goft, Kalbian, Kangas, Kelley, Koehlinger; **Professors Emeriti:** Carey, Jones, Moore, Rubenstein, Sandon, Wellborn

The Department of Religion at Florida State University offers the MA and PhD in the study of religion.

The MA and PhD in the study of religion combine broad exposure to the field with the development of a particular area of expertise. Those wishing to obtain information about the MA and PhD in the study of religion should consult the Department of Religion Web site at <http://www.fsu.edu/~religion/>.

Requirements

The minimum criterion for admission to the MA program is a “B” average on all undergraduate work and a combined score of at least 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 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 Asia; American religious history; or religion, ethics, and philosophy. Students should indicate their intention to work in a particular area in their application; they may change concentrations prior to the third semester of course work.

During their course of study, students will meet several general requirements. These include: thirty-three (33) semester hours of course work in religion or other approved courses; successful completion of REL 5035, Graduate Introduction to the Study of Religion; and competence in one foreign language approved by department faculty.

Students will also meet the requirements of their area of concentration. For each of the four concentrations, a “concentration committee” made up of religion faculty exercises oversight. The committee for a particular concentration will advise students concerning requirements for their area, including (for example) specified course work, 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.

Doctorate in Religion

Requirements for the PhD program include twenty-four (24) semester hours of approved course work 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: religions of western antiquity; religions of Asia; American religious history, and religion, ethics, and philosophy. Students should contact the department office to obtain information about these matters.

Definition of Prefixes

REL—Religion

SAL—South Asian Languages

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 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 5332. Modern Hinduism (3). Selected topics on the Hindu tradition in 19th and 20th century India. Includes modern Hindu thinkers, reform movements, popular religion, Hindu nationalism, and pluralism. Attention also to Hindu-inspired religious movements outside India and to other topics of student interest.

REL 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 5565. Modern Roman Catholicism (3). The Catholic Church from the Council of Trent to the present day; special consideration given to Vatican II, current problems, and leading thinkers.

REL 5612. Judaism in the Graeco-Roman World (3). A history of the Jews and the development of Jewish religious ideas, literature, institutions and practices from the Maccabean Revolt to the redaction of the Babylonian Talmud.

REL 5616. Modern Judaism (3). The development of Judaism as a religious and cultural phenomenon in Europe, North America, and the Middle East from the European Enlightenment to the birth of the State of Israel.

REL 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 philosophical 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 5937r. Special Topics in Religion (3). 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 course work 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). (P/F grade only.) May be repeated in the same semester.

REL 8966r. Master’s Comprehensive Examination (0). (P/F grade only.)

REL 8976r. Master’s Thesis Defense (0). (P/F grade only.)

REL 8985r. Dissertation Defense (0). (P/F grade only.) May be repeated in the same semester.

SRK 5236, 5237. Intermediate Readings in Sanskrit I, II (3, 3). Introduction to Sanskrit reading through a study of grammar, syntax, and vocabulary.

RELIGION:

see also Asian Studies

RESEARCH AND EVALUATION METHODS
see Educational Psychology and Learning Systems

Department of 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, Sirmans, Stauber; **Associate Professor:** Dumm; **Assistant Professors:** Cole, Hall, Holmes, McCullough; **Associates in Business Law and Real Estate:** Bailey, 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

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.

Online 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.

The College of Business also offers an online Master of Business Administration (MBA) program in which students may choose to concentrate in real estate finance and analysis.

Requirements

The master's degree with a major in insurance requires completion of thirty-three (33) semester hours of graduate level course work. The doctoral program primary area course work 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 finance and real estate, but there is flexibility to match the interests of the particular student.

Definition of Prefixes

BUL—Business Law

REE—Real Estate

RMI—Risk Management/Insurance

Graduate Courses

Master's

Note: The 5000 level courses are reserved exclusively for graduate students. No courses carrying both undergraduate and graduate credit are offered. Courses which may be repeated for credit are designated by "1" 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 5205. Topics in Real Estate Finance and Appraisal (3). This course is designed to provide advanced treatment of topics fundamental to real estate finance and appraisal. This course includes a discussion of primary and secondary mortgage markets; capital market operations; mortgage instruments; and mortgage-related securities. In addition, the course provides an advanced treatment of the valuation of real estate, including presentation and a critical review of existing appraisal history.

REE 5209. Advanced Real Estate Finance and Investment (3). This course provides advanced treatment of the commercial mortgage and real estate equity markets. Topics include in-depth discussion of financing income-producing properties; commercial mortgage underwriting; real estate investment trusts; and the decisions faced by institutions regarding their property and mortgage portfolios. Emerging topics of special interest also are discussed.

REE 5305. Real Estate Investment (3). This course introduces students to the procedures and analytical methods used to evaluate real estate markets and project-specific investments. The course focuses on the topic of real estate investment analysis primarily from the private (equity) investor's perspective.

REE 5315. Real Estate Project Feasibility Analysis (3). Introduction to real estate decision-making process for determination of real estate site use or investment being used, dealt with, or pursued.

REE 5435. Real Estate and Its Legal Environment (3). This course presents an overview of the real estate markets and the laws affecting land use. This course provides an advanced treatment of the legal environment of real estate, including those issues related to property ownership and its transfer, and the contracts applied in the acquisition, operation, and disposition of property.

REE 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 toward 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). (P/F grade only.)

RMI 8976r. Master's Thesis Defense (0). (P/F grade only.)

Doctoral

Note: The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases master's candidates may elect 6000 level courses with permission of the instructor and the associate dean for academic programs.

RMI 6195. Doctoral Seminar in Insurance: Life/Health Insurance Topics (3). Review of current literature and theory in life/health insurance, including product development, management and regulation of life insurance companies, and the place of life insurance companies in the capital markets.

RMI 6296. Doctoral Seminar in Insurance: Property/Liability Insurance Topics (3). Review of current literature and theory in property/liability insurance, including product development, management and regulation of property/liability insurance companies, and the place of property/liability insurance companies in the capital markets.

RMI 6395. Doctoral Seminar in Risk and Insurance Theory (3). Review of literature in the theoretical foundations of risk and insurance, including the concept of risk, contributions from other disciplines, determinants of insurance consumption and risk management decisions, and industry dynamics.

RMI 6917r. Supervised Research (1-3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five (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). (P/F grade only.)

RMI 8985r. Dissertation Defense Examination (0). (P/F grade only.)

RUSSIAN:
see Modern Languages and Linguistics

Interdisciplinary Program in RUSSIAN AND EAST EUROPEAN STUDIES

COLLEGE OF SOCIAL SCIENCES

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.

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 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 toward 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 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 on a series of policy studies seminars. The seminars emphasize comparative policy analysis, which 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 eight (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	Comparative 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 5005	Seminar in Comparative Economic Systems (3)
ECS 5028	Economies in Transition (3)
GEA 4554	Russia and Southern Eurasia (3)
GEA 5195r	Advanced Area Studies (3)
GEO 5358	Environmental Conflict and Economic Development (3)
GEO 5425	Cultural Geography (3)
GEO 5465	Historical Geography (3)
GEO 5472	Political Geography (3)
GEO 5481	Military Geography (3)
INR 5014	Contexts and International Relation (3)
INR 5036	International Political Economy (3)

INR	5088	International Conflict (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	5335	Russian Poetry (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)
RUW	5930	Special Topics
SEC	5900r	Studies in Serbo-Croatian Language and Literature (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—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 is required.
EUS 8966r.	Master's Comprehensive Examination (0). (P/F grade only.)
EUS 8976r.	Master's Thesis Defense (0). (P/F grade only.)

SANSKRIT:
see Religion

SCHOOL PSYCHOLOGY:
see Educational Psychology and Learning Systems

SCIENCE EDUCATION:
see Middle and Secondary Education

SERBO-CROATIAN:
see Modern Languages and Linguistics

SLAVIC LANGUAGE AND LITERATURE:
see Modern Languages and Linguistics

SOCIAL ORGANIZATION, PROCESSES:
see Sociology

SOCIAL PSYCHOLOGY:
see Psychology; Sociology

Interdisciplinary Program in SCIENCE TEACHING

This interdisciplinary major is designed to combine the undergraduate- and graduate-level experiences of the Colleges of Arts and Sciences and Education to produce exceptionally well-prepared science teachers. The program allows students to take graduate level courses in their senior year that count toward both the bachelor's and master's degrees. Students completing this "3 + 2" program will receive a bachelor of science (BS) degree at the end of the fourth year, and a master of science teaching (MST) degree at the end of the fifth year. They will be qualified for certification to teach in middle and high schools in Florida, and prepared for national certification.

As of the publication of this document, additional requirements for the degree were still being finalized. For more information, contact Dr. Ellen Granger at (850) 644-6747, or Robin Smith at (850) 644-1142.

Definition of Prefix

ISC—Interdisciplinary Sciences

Graduate Courses

ISC 5098.	Reflective Science Teaching (2). Prerequisite: ISC 5535. Corequisite: ISC 5946. This course provides a forum for discussion of contemporary science teaching issues and concerns associated with the corequisite half-time internship.
ISC 5525.	Advanced Portfolio Design (1). Prerequisite: ISC 5535. This course teaches students how to design and construct teaching portfolios in the online format of a web log.
ISC 5535.	Research in the Content Area for Teachers (6). This course immerses preservice teachers in science research and reflection on the pedagogy of inquiry-based teaching. Students also develop a template for designing inquiry-based teaching in the classroom.
ISC 5944.	Ethics, School Law, and Management of Science Classrooms (3). Prerequisites: ISC 5098, 5535, 5946. Corequisite: ISC 5945. This course provides support and guidance to Master's in Science Teaching students engaged in student teaching. The focus is on classroom management and planning, professional ethics, and state and federal school laws.
ISC 5945.	Full-Time Teaching Internship (9). Prerequisites: ISC 5098, 5535, 5946. Corequisites: ISC 5944, 8938. Students in the Master's in Science Teaching program complete at least thirteen (13) weeks of student teaching in the classroom.
ISC 5946.	Half-Time Teaching Internship (6). Prerequisite: ISC 5535. Corequisite: ISC 5098. Students concentrate on observing the management, teaching, and assessment strategies of a supervising teacher and complete two work sample teachings units, each at least a week long in the classroom.
ISC 8938.	Portfolio Review (0). (S/U grade only.) Prerequisite: ISC 5525. Corequisite: ISC 5944, 5945. This zero-credit course is required to allow assessment of students' individual portfolios based upon Florida's Twelve Educator Accomplished Practices. These portfolios are the summation of work accomplished during the master's degree program, and must receive a positive evaluation for program completion.

Interdisciplinary Program in SOCIAL SCIENCE

COLLEGE OF SOCIAL SCIENCES

Director: Robert E. Crew, Jr., Office of the Dean, College of Social Sciences

Note: The information in this chapter is for reference purposes only for currently-enrolled students. This program is no longer accepting applicants.

The Interdisciplinary Program in Social Science (ISS) offers a course of study that leads to the master of arts (MA) or master of science (MS) and provides a broad background in the social sciences for students who find the curriculum of a single discipline too confining for their individual interests. In addition, the program may be used to develop specific preparation in a number of interdisciplinary fields, including: 1) teaching of social science in the junior college and in the public schools; 2) organization of community and urban change; and 3) budget/policy analysis. Courses are selected from those offered by the participating departments of Anthropology, Economics, Geography, History, Political Science, Sociology, and Urban and Regional Planning, and the Reubin O'D. Askew School of Public Administration and Policy.

Requirements

Admission to the program is limited to students who have a score of 1000 on the aptitude test of the Graduate Record Examinations (GRE) or a 3.0 undergraduate grade point average (GPA). Students admitted to the program must also have a minimum of thirty-six (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 Prefixes

CPS—Comparative Policy Studies

ISS—Interdisciplinary Social Sciences

Graduate Courses

CPS 5424. Research Seminar in Comparative Managerial and Organizational Policies (3). Comparative analysis of the political and administrative organization and their implications.

CPS 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine (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 5326. Marketing in the Public and Nonprofit Sector (1–3). This course provides information about the value of a marketing orientation to public and non-profit organizations.

ISS 5386. Information and Communication Management (3). This course examines major management issues in government/nonprofit information technology, including the following: differences in public/nonprofit sectors and private sector; issues surrounding organizational structure for information service delivery; MIS planning and standard setting methods; personnel/staffing issues; procurement; and security and privacy.

ISS 5905r. Directed Individual Study (3). May be repeated to a maximum of six (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). (P/F grade only.)

ISS 8976r. Master's Thesis Defense (0). (P/F grade only.)

**SOCIAL SCIENCE EDUCATION:
see Middle and Secondary Education**

**SOCIAL SCIENCE AND EDUCATION:
see Educational Leadership and Policy Studies**

SOCIAL WORK

COLLEGE OF SOCIALWORK

Professors: Figley, Mazza, McNeece, Smith, Thyer, Vinton; **Associate Professors:** Abell, Crook, T. Gomory, Ryan; **Assistant Professors:** Hinterlong, Siebert, Teasley, Wilke; **Faculty Administrators:** Graham, Lager, Maddox; **Assistants in Field Instruction:** Allen, Boone, Calohan, Detweiler, Ley, Schultz, Sheheen, Spring, Wilson, Yanke; **Assistant in Field Instruction and Academic Advising:** Mathis; **Associate in Social Work:** Cleveland; **Lecturers:** Berry, F. Gomory, Keroack

The College 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 develop social work scholars and leaders in research and education who use systematic methods of inquiry and reasoned argument to advance knowledge.

For complete details of graduate degree requirements, plus a description of the college, its opportunities, and available financial assistance, refer to the "College of Social Work" chapter in this *Graduate Bulletin*, or refer to <http://csw.fsu.edu>.

Definition of Prefix

SOW—Social Work

Graduate Courses

Note: The College of Social Work regards courses accompanied by a "+" as clinical/direct practice courses that may apply toward licensure. As different boards of licensure set these criteria, the College cannot guarantee acceptance of all of these courses.

Note: There must be sufficient enrollment for particular elective courses to be offered.

SOW 5105+. Human Behavior and the Social Environment I (3). This course focuses on reciprocal relationships between human behavior and social environments. Content includes empirically-based theories and knowledge that focus on the interactions between and among systems of all sizes, including individuals, groups, societies, and economic systems. Theories and knowledge of biological, psychological, sociological, cultural, and spiritual development across the life span are critiqued, especially as they relate to populations at risk. In addition, theories and knowledge about the range of social systems (individual, family, group, organizational, and community) in which people live are examined, including the ways social systems promote or deter people in maintaining or achieving health and well-being.

SOW 5109+. Women's Issues and Social Work (3). This course acquaints students with individual and social factors that affect women throughout the life span using an interdisciplinary approach. Particular attention is given to the intersections of race, age, social class, sexual orientation, and other systems of inequality that impact on women's lives. The role of the social work profession in changing society's view of women, and the role of practitioners in enabling or empowering women are also examined.

SOW 5125+. Psychopathology in Clinical Practice (3). This course provides an overview of mental health assessment and diagnostic tools, including the Diagnostic Statistical Manual categories, and touches on treatment strategies and techniques. Building on the knowledge base acquired in the foundation course, SOW 5105, this course examines the relationship between the biological, psychological, social, environmental, and cultural influences and emotional and mental health from an ecological context. Particular attention is given to variations in the assessment process and access to treatment for populations at social and economic risk. In addition, students examine the political and social implications of mental health and their relations to social work values and ethics.

SOW 5153+. **Human Sexuality (3).** This course surveys issues and attitudes associated with human sexuality. It is primarily intended for social workers and other helping professionals who currently work with clients or plan to in the future. Using a biopsychosocial perspective, emphasis is placed on the social, cultural, familial, and individual differences in sexual and reproductive attitudes, values, and behavior. Students are introduced to common sex-related issues and to the particular concerns of various sexually oppressed groups. Information is also provided about childhood sexual abuse and adult victimization and their relationship to intimacy issues clients typically present in direct practice.

SOW 5235+. **Policies and Programs in Social Services (3).** The course provides an initial opportunity to investigate the relationships among individual and collective social welfare and public policy in American society from a social work perspective, with emphasis placed on understanding these relationships in terms of social and economic justice. Particular attention is paid to acquisition of skills necessary to engage in policy advocacy and formulation consistent with social work values and ethics, fostering an appreciation for the roles played by social workers in the development of the American welfare state, and reviewing the history of the social work profession.

SOW 5238. **Advanced Policy Analysis (3).** Prerequisite: SOW 5235. This course introduces students to the procedures and processes of social policy analysis and evaluation. Attention is given to policy originating within all levels and branches of government, as well as within organizational settings. The course examines how issues are brought to the attention of decision-makers and the methods used in policy formulation. Students learn skills central to policy work, including problem definition, development and examination of policy alternatives, planning for implementation, and evaluation. The course prepares individuals to participate in the creation and assessment of social welfare policies that impact populations at risk.

SOW 5282. **Legislative Advocacy (3).** This course exposes graduate students to the skills necessary to become effective human service advocates dealing with unmet needs, resolving social problems, or working to ameliorate unjust or inequitable conditions in society. As more decisions about social welfare programs have shifted from the federal to the state and local community levels, it is increasingly important for social workers to develop lobbying and advocacy skills to ensure social and economic justice. Such skills can help bring about much-needed policy changes for clients, promote and protect social work ethics and values, and positively affect human service funding during the budget appropriation process.

SOW 5308+. **Social Work Practice (3).** This course provides students with an understanding of the social work profession's history, mission, values, ethics, and roles. Content on generalist social work practice with individuals, families, groups, and communities is covered, and attention is given to working with ethnic minorities, women, gays and lesbians, and disabled people.

SOW 5324+. **Group Treatment in Social Work Practice (3).** This course is an advanced practice class in the clinical concentration. It examines theoretical foundations and practice techniques of group treatment models. General topics include group purpose, composition, and dynamics; leadership development; stages of group development; evaluation; and the ethical aspects of group work.

SOW 5334. **Organizational and Community System Change (3).** The course provides students with an advanced understanding of the models for planned change in organizational and community systems. In accordance with systems theory, organizations and communities are understood as interdependent, complex, open systems influenced by other micro, mezzo, and macro systems in the larger environment.

SOW 5335+. **Theories and Models of Social Work Practice (3).** This class introduces students to a range of theories and models of social work practice within an ecological systems framework. The empirical bases of each theory and model are examined, along with applications to generalist social work practice with various size systems. Attention is given to how theories and models incorporate working with ethnic minorities, women, gays and lesbians, and disabled people.

SOW 5340+. **Theory and Practice of Poetry Therapy (3).** This course introduces students to the theoretical foundations and practice techniques of poetry therapy. Specific attention is given to the use of the poetic (language, symbol, and story) in individual, couple, family, group, and community practice. The course format includes lectures, topic and case discussions, skill building exercises, and role-plays. The activities in class and assignments relate to the use of poetry therapy in a variety of human service settings.

SOW 5345. **Advanced Social Services Administration (3).** This course examines theories of administrative practice and provides skill development in executive leadership, decision-making, strategic planning, and client-centered management. This course adopts a problem-solving approach and exposes students to a variety of complex issues present in the operation and management of social services entities. This course is taught from an interdisciplinary perspective so that students may fully explore the underlying ethical, social, legal, psychological, and political dynamics present when policy must be put into practice.

SOW 5349+. **Social Networking and Case Management in Social Work (3).** This course examines the history, theoretical underpinnings, and strategies of case management in various service delivery systems. Contemporary issues and implications that impact the practice environment are highlighted. General topics include critical skills in assessment, formal and informal linkage, counseling and consultation, advocacy, mediation and conflict resolution, and monitoring and evaluation. Students apply critical thinking skills and utilize evidence-based practice approaches in case management settings.

SOW 5353+. **Marital and Couple Counseling in Social Work Practice (3).** Prerequisite: SOW 5611. This course introduces students to the theoretical foundations and practice techniques of couple/marital counseling. The major models of couple/marital counseling are examined. Particular emphasis is placed on having each student integrate a theory and method of couple/marital counseling within social work practice. Students examine a wide range of populations including minorities, gay and lesbian persons, and persons with disabilities. This course contains a predominant experiential component, and therefore students are expected to take a very active role in their learning.

SOW 5367+. **Theories and Practice of Crisis Intervention (3).** This course introduces students to the theoretical foundations and practice models of crisis intervention and other forms of brief treatment.

SOW 5369+. **Integrative Seminar in Advanced Social Work Practice (3).** Corequisite: SOW 5353. This course integrates theoretical models and concepts with practice gained in internships. The course utilizes an ecosystems perspective, focusing on the dynamic interaction between the individual, family, communities, organizations, and other social systems. A major focus is on the social worker's role in responding effectively to the challenges of working with these systems and exploring their own personal views of such issues as ethics, gender, ethnic minorities, gays, lesbians, and disabled people.

SOW 5374+. **Supervised Visitation (3).** (S/U grade only.) This course offers students an opportunity to be involved in conducting supervised visitation in conjunction with the Florida Department of Children and Families with the goal of providing a controlled, safe and supportive environment for children to visit with their non-custodial parent on a regular basis, thereby enabling an ongoing relationship between parent and child. Course participation will provide students an opportunity to: facilitate the interaction between these parents and children in a supervised setting; record their observations; analyze applicable child welfare policies and procedures; and integrate theoretical understanding of domestic violence, substance abuse, sexual abuse, child abuse and/or neglect to families participating in the program.

SOW 5376. **Budgeting and Finances in Social Services (3).** This course emphasizes the political and technical skills of budgeting and financial management, source development via grant writing and fundraising, government contracting, fiscal reporting, and payroll management.

SOW 5377. **Personnel Administration in the Social Services (3).** This course develops students' skills in personnel management in human service organizations to ensure effective service delivery to clients. Attention is given to staff management approaches, staff supervision, employee recruitment and retention, motivation, job design, staff development, and issues of diversity.

SOW 5404+. **Introduction to Social Work Research (3).** This course introduces students to qualitative and quantitative research methods in order to provide an understanding of a scientific, analytic, and ethical approach to building knowledge for practice. Students' mastery of course content prepares them to develop, use, and effectively communicate empirically-based knowledge. Research knowledge is used by students to provide high-quality services; to initiate change; to improve practice, policy, and social service delivery; and to evaluate their own practice from an evidence-based perspective.

SOW 5432+. **Evaluation of Social Work Practice (3).** Prerequisite: SOW 5404. Major emphasis is given to the use of single systems designs in client assessment and evaluation. Students consider the philosophical and ethical aspects of an evaluative approach to treatment and examine the policy implications of professional participation (or lack thereof) in evaluation processes. Topics include the operational "diagnosis" of client problems; measurement and monitoring of symptoms, goals, and interventions; and analysis, interpretation, and reporting of case material for accountable social work practice. Issues of ethnicity, gender, sexual orientation, and disability are explored through application of course content to appropriate case examples.

SOW 5435. **Social Program and Policy Evaluation (3).** Prerequisite: SOW 5404. This course presents the historical and contemporary importance of social program evaluation and research methods. The course focuses on applied qualitative and quantitative evaluation methods that are useful to managers, public administrators, and policy analysts. Particular emphasis is placed on evidence-based procedures/methods that will be useful for social work administrators for designing and carrying out an evaluation of social programs and policies. How programs and policies can further the cause of social and economic justice for oppressed and disadvantaged groups is also explored.

SOW 5455. **Grant Writing and Grant Management (3).** While funding agencies have their own guidelines, there are some commonalities among grant proposals. This course covers the basics of proposals: purpose statements, background and justification, aims or objectives, personnel, time line, methods, budget, evaluation, and how to effectively manage grants once they are funded. Particularly in the public and not-for-profit sectors, grants may be necessary to expand the type or number of resources available to clients; therefore, grant writing is related to social work objectives that stress access to and availability of resources. The needs of disenfranchised groups or communities are discussed in this course, along with the particulars of proposals that may be most effective in meeting such needs.

SOW 5532r. **Graduate Field Instruction I (5-10).** (S/U grade only.) Prerequisite: SOW 5308. This course is required for first-year graduate students and taken concurrently with course work. Students are provided with a supervised generalist social work practice experience in a variety of settings. May be repeated to a maximum of ten (10) semester hours.

SOW 5535r. **Graduate Field Instruction II (6-12).** (S/U grade only.) This course is required for advanced graduate students and taken concurrently with Advanced Seminar in Social Work Practice. May be repeated to a maximum of twelve (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 Education. May be repeated to a maximum of twelve (12) semester hours.

SOW 5603+. **Social Work in Health Settings (3).** This course focuses on social work practice in health settings from a "person-in-environment" perspective, preparing students with an understanding of the roles that social workers play in health settings; the structure of health care delivery systems; organizational and professional ethics and standards; challenges we face in health care policy; patient issues and how to help to address these issues. Specific knowledge and skills in a health care setting are addressed, including biopsychosocial assessments, chart documentation, treatment planning, and discharge planning.

SOW 5611+. **Family Counseling in Social Work (3).** This course introduces students to various theoretical models of family counseling and presents assessment and intervention strategies and techniques.

SOW 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).** This course, looking at violence across the life span, provides an ecological perspective emphasizing the interconnections between individuals experiencing violence and their social environments. Emphasis is placed upon broad coverage of all-important aspects of child abuse, incest, intimate partner violence, rape, and elder abuse. This course is appropriate for students who wish to gain skill in detecting and responding to incest situations for clients, sexual assault survivors, and victims of intimate partner violence or elder abuse.

SOW 5623+. **Social Work With Black Families (3).** This class critically analyzes African-American/black family life, culture, structure, and functioning. The focus is on knowledge and skill development for family intervention. Specifically, students review the historical development of black families in America, evaluate and analyze major family theoretical models, identify practice strategies and gaps and/or deficiencies in the existing social work practice literature, and focus on the advantages and disadvantages of utilizing these models in practice with black families.

SOW 5628+. **Mental Health of Diverse Populations (3).** This course critically examines various factors that impact the mental health of diverse populations. Students critically review/analyze recent mental health literature concerning the cultural context in which the mental health needs of diverse populations have evolved, the major services required to meet the mental health needs of diverse populations and the availability and accessibility of these services, and the strategies and skills (both micro and macro) necessary to improve the delivery of mental health and mental health related services to diverse populations.

SOW 5635+. **The Social Worker in the Public School System (3).** School social workers seek to maximize student success and promote optimal learning opportunities by helping to remove the variety of barriers that prevent school-based personnel and children from working to the best of their abilities. This course introduces the student to school social work practice and related issues. In order for students to experience the role of the school social worker as realistically as possible, both systematic and theoretical approaches to learning are presented.

SOW 5646+. **Aging and Old Age: Social Work Perspectives (3).** This course introduces students to the field of social gerontology and gerontological social work. The class provides an overview of a variety of topics such as the demography of aging and the physical, cognitive, and psychosocial aspects of aging. The course also covers health care and social policies that impact older persons and caregivers, along with the aging network of services. How forms of oppression such as ageism, sexism, racism, ablebodyism, beautyism, and homophobia impact our work with older people is discussed, along with how to promote dignity, self-determination, and social and economic justice for older persons. The role of both informal and formal support networks is stressed as students learn to comprehensively assess older clients and devise intervention and evaluation plans.

SOW 5655+. **Social Work with Children and Adolescents (3).** Students in this course increase knowledge and understanding essential for effective therapeutic interventions in the psychological and behavioral disorders of children and develop special skills in selected intervention techniques and modalities in working with children in a variety of professional roles.

SOW 5656+. **Child Welfare Practice (3).** This course is designed to provide a framework of values, knowledge, and skills necessary to practice with vulnerable children and their families. The major focus is on social work in public child welfare agencies and children's mental health agencies. The course utilizes an ecosystem perspective for understanding and assessing the special needs of at-risk children and families. Specific attention is on assessing families and children using the State of Florida's risk and safety assessment protocols and other family assessment instruments.

SOW 5659+. **Mental Health and Child Welfare (3).** This course provides students with knowledge and skills related to the theory, research, and implications of child and adolescent maltreatment for child development and psychopathology. Course content is presented within the context of child welfare practice and social work with children and adolescents in public agencies and programs. Particular attention is given to common psychological disorders that result from maltreatment and accompanying treatment issues. Issues related to individuals, families, groups, and communities are covered, and attention is given to working with ethnic minorities, women, gays and lesbians, and persons with disabilities.

SOW 5666+. **Juvenile Justice: A Social Work Perspective (3).** This course provides students with an overview of the juvenile justice system. This includes the history of the juvenile justice system, the juvenile court system, the role of law enforcement, policy development and implementation, 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 5688+. **Living with AIDS: Prevention, Intervention and Care (3).** This course provides a comprehensive overview of the biopsychosocial implications of HIV/AIDS. Topics include the origins of the illness, its prevalence and spread throughout world cultures, and its impact on the individual and society. Medical issues are discussed from perspectives of viral acquisition and transmission, treatment trials, intervention in opportunistic infections, medication adherence, and the search for vaccination and cure. Psychological issues are addressed through examinations of the impact of the illness on the individual. Attention is given to variations associated with gender, race, age, and sexual orientation of affected and infected persons, and to the impact of HIV/AIDS on the varying communities of which they are a part.

SOW 5712+. **Chemical Dependency Problems and Programs (3).** This course includes discussions, readings, lectures, and audiovisual materials on all the major drugs, including alcohol, opiates, stimulants, sedatives, hallucinogens, inhalants, and nicotine. We cover the etiology and epidemiology of drug abuse, physiological and behavioral consequences of drug abuse, treatment approaches, and major policies and programs. Special attention is directed toward drug abuse in special populations, such as women, racial and ethnic minorities, gays and lesbians, persons with disabilities, and the elderly. We also spend a considerable amount of time discussing social work with involuntary clients, since most persons receiving treatment for chemical dependency probably fall into this category. A systems perspective is used to relate drug-using behavior to family, community, and social systems.

SOW 5745+. **Seminar on Loss and Bereavement (3).** This course is for students who wish to increase their knowledge and understanding of issues around loss, bereavement, dying, and death, and how we can live life to the fullest while addressing these challenges both personally and with our clients. The primary focus is on six topics: 1) theories of loss and grief; 2) personal feelings, fears, and expectations of the inevitable; 3) death and dying rituals from a cross-cultural perspective; 4) responses to loss and bereavement throughout the life cycle; 5) understanding different bereavement situations, such as suicide, SIDS, etc.; and 6) assessment and intervention strategies with individuals, families, and groups.

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. **Measurement in Social Work Research I (2).** This course focuses on the development, testing, and use of measurement tools in social work practice research. Emphasis is on understanding the conceptual relevance and operational clarity of theoretical constructs and on the methods available for designing and validating instruments to measure them. Qualitative and quantitative techniques are examined for their varying contributions to item development and scale construction, and data analytic strategies for determining psychometric characteristics are explored. This course is taught over two consecutive semesters.

SOW 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 analyzes the theoretical and conceptual frameworks necessary for understanding public social policy.

SOW 6492. **Foundation Research Methods (4).** This course focuses on basic research methods, including problem formulation, ethical considerations in planning and conducting research, assumptions, conceptualization, hypothesis building and testing, basic sampling, and various non-experimental, quasi-experimental, and experimental designs. Students study a range of theoretical and political perspectives encompassing both deductive and inductive research traditions.

SOW 6494. **Advanced Research Methods (3).** Students in this course develop a more sophisticated understanding of the research enterprise. The course focuses on developing specific advanced competencies in conceptualization, sampling, design, measurement, data collection, and data analysis. Students also identify practical and ethical dilemmas common in research, especially as they relate to membership in vulnerable populations.

SOW 6495. **Systematic Reviews in Social Work Research (3).** This course familiarizes the student with the philosophy and methodology of designing and conducting systematic reviews of research relevant to social work. Topics include the selection and review of published research articles, methodological issues unique to particular problems and diverse populations, and the synthesis of literature in students' areas of specialization.

SOW 6697. **Philosophies of Science in Social Work (3).** Examination of the philosophical bases of various approaches to social work practice and research.

SOW 6755. **Theories and Models of Social Work Research (4).** This first-semester doctoral seminar uses an evidence-based framework to prepare students to understand the role of theory in research, to critically appraise theories for their usefulness, and to utilize theory in conceptualizing research problems, developing research questions from these problems, and creating research designs.

SOW 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 six (6) semester hours.

SOW 6930. **Teaching Seminar and Practicum (1-4).** (S/U grade only.) Students assigned as teaching assistants in foundation social work courses take this class to gain familiarity with pedagogical theories and strategies for development and delivery of course content, course management, and assessment. Students practice skills in the classroom and receive guidance and feedback from experienced instructors.

SOW 6938r. **Selected Topics in Social Work (3).** May be repeated to a maximum of nine (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 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).** (P/F grade only.)

SOW 8966r. **Master's Comprehensive Examination (0).** (P/F grade only.)

SOW 8976r. **Master's Thesis Defense (0).** (P/F grade only.)

SOW 8985r. **Dissertation Defense (0).** (P/F grade only.)

SOCIOLOGICAL ANALYSIS: see Sociology

Department of SOCIOLOGY

COLLEGE OF SOCIAL SCIENCES

Chair: Patricia Y. Martin; **Professors:** Carlson, Eberstein, Keith, Martin, Orcutt, Padavic, Quadagno, Turner; **Associate Professors:** Brewster, Reynolds, Simon; **Assistant Professors:** Barrett, Dixon, Lloyd, McCabe, Rohlinger, Schrock, Starks, Taylor, Tillman, Ueno; **Assistant in Sociology:** Schwabe; **Visiting Assistant in Sociology:** Luke; **Visiting Instructor in Sociology:** Lessan; **Professors Emeriti:** Armer, Fendrich, Ford, Hardy, Hazelrigg, Isaac, Kinloch, Nam; **Affiliate Faculty:** Barker, Chiricos, Hinterlong, Miles, Milton

The Department of Sociology offers graduate degree programs leading to the Master of Arts (MA), Master of Science (MS) and Doctor of Philosophy (PhD) degrees. The department's primary objective is to enable students in our graduate programs to become scholars who are able to engage in high-quality, innovative research and to provide the

education and training that will serve as a basis for independent or collaborative research, depending on the individual graduate's professional goals. Our main emphasis is on research, in order to provide the skills needed for employment at top-level research institutes and organizations. Students also obtain the experience and proficiency to teach at the spectrum of institutions of higher learning, including liberal arts colleges, regional universities, and research universities. Numerous graduates also have filled positions in business corporations and government agencies.

The department's most recent addition, the Master of Science with a major in applied social research, may be completed in one calendar year if entered in the Fall semester. 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.sociology.fsu.edu>.

The Department of Sociology is located in the Bellamy Building in the heart of Florida State University campus and includes such resources as a departmental computer laboratory for graduate students as well as other facilities at the **Pepper Institute on Aging and Public Policy**. The **Center for Demography and Population Health** (also located in Bellamy) contains a library with extensive population and demographic materials that are available to both faculty and students.

Requirements for Admission

Under normal circumstances, departmental requirements for graduate admission into the traditional Master's degree program, which generally leads into the Doctoral program, include a 3.0 GPA for the last two years of undergraduate study *and* a combined quantitative and verbal score of at least 1000 on the Graduate Record Examination (GRE). Requirements for graduate admission into the Master's program in Applied Social Research (a one-year course of study) include a 3.0 GPA for the last two years of undergraduate study *and* a combined quantitative and verbal score of at least 1000 on the GRE. Applicants must also have received a "C" or higher grade in a three (3) semester hour college-level course in statistics.

Most students enter in the Fall semester, although some are admitted into the program during the Spring semester. Students who wish to be considered for fellowships or departmental assistantships must submit a completed application by January 10 of the year preceding their proposed entry into the graduate program. For students only applying for admission, applications for Fall admission are due by June 1, and applications for Spring admission are due November 1. Application for admission may be made online at <http://www.sociology.fsu.edu>. Some materials must be submitted both to sociology and to the Florida State University Graduate School Admissions Office. Consult the departmental Web site or contact the department at (850) 644-6416 for further information.

Financial Aid

The Department of Sociology makes every effort to provide financial assistance for students seeking the PhD degree. Financial aid possibilities include fellowships, teaching assistantships, and research assistantships. Students who receive financial assistance and make expected progress may receive support for up to four years.

Master's Degree Programs

Master of Science with a major in Applied Social Research option

A total of thirty-three (33) semester hours are required, with a minimum of twenty-one (21) hours of graduate course work that must be taken on a letter-grade basis in the Department of Sociology. Additional hours may be taken in sociology or in other appropriate graduate programs with approval of the sociology graduate director.

A minimum of fifteen (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 of the following research methods courses or an approved substitute is required:

- SYA 5315 Qualitative Research Methods in Sociology (3)
- SYA 5355 Comparative Historical Sociology (3)
- SYD 5135 Techniques of Population Analysis (3)
- SYD 5137 Fundamentals of Epidemiology (3)

A minimum of eighteen (18) semester hours of electives is also required.

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 the student's major program area
3. Teaching of an undergraduate course
4. A doctoral dissertation

Requirements

There are four areas of study from which PhD students may select major and minor substantive areas: doctoral students must complete five courses in their major (primary) area and three courses in their minor (secondary) area.

Demography addresses issues related to birth (fertility, fecundity), marriage, health (morbidity), death (mortality), and migration (internal to the US and globally), including study of the vital processes and migration, per se, as well as a focus on how social institutions and processes affect and are effected by demographic events.

Health and Aging considers the social distributions of psychological distress and disorder, substance abuse, and deviant behavior. Students also explore the relationship among such issues as health and labor force participation, health and family relationships, public insurance programs for the elderly, and the causes and consequences of inequality in access to health care over the life course.

Inequality and Social Justice involves the study of race, gender, and class inequality, the social movements mobilized to effect social change, inequality in work and labor markets, and the political processes that contribute to or help ameliorate inequality.

Social Psychology enables students to gain expertise in classical and cutting-edge approaches to understanding the relation between the self and society. The area focuses on training students to understand and critically evaluate theory and research on social psychological processes.

Research Methods and Statistics may also be chosen as a minor area.

To receive the PhD degree, students must complete requirements beyond the master's degree and/or departmental core curriculum, as well as teach an undergraduate sociology course. Additional requirements are as follows:

- SYA 5407 Advanced Quantitative Methods
- SYA 5315 Qualitative Research Methods in Sociology, or SYA 5355 Comparative Historical Sociology
- Three (3) semester hours of SYA 6660, Teaching at the College Level in Sociology
- Fifteen (15) semester hours of five (5) major area courses
- Nine (9) semester hours of three (3) minor area courses
- Written preliminary exam in major area
- Doctoral dissertation

Definition of Prefixes

DEM—Demography

SYA—Sociological Analysis

SYD—Sociology of Demography and Related Area Studies

SYO—Social Organization

SYP—Social Processes

Graduate Courses

Core

SYA 5018. Classical Social Theory (3). An introduction to the works of major social theorists in the nineteenth and early twentieth centuries, concentrating mostly on Marx, Durkheim, and Weber. How did they prefigure the development of sociology as a social science? How do their perspectives relate to such early American theorists as W.E.B. DuBois and Charlotte Perkins Gilman?

SYA 5126. Contemporary Sociological Theory (3). An introduction to the works of a broad range of recent theorists, primarily post-1945. Major emphasis is given to central issues and problems of recent theory and to critical analyses of logical-structural adequacy of theorizing. A student ordinarily completes SYA 5125 or its equivalent prior to this course.

SYA 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 5305. Introduction to Research Methods (3). Reviews rationales for performing sociological research and examines the relationship between sociological theory and research design. Reviews the dimensions of research, e.g., measurement theory, definition and concept formation, strategies of theory testing, adequacies and deficiencies of different research designs, statistical and causal inference.

SYA 5315. Qualitative Research Methods in Sociology (3). A seminar in qualitative research methods that allows for the systematic collection and analysis of (non-numeric) observational and interview data obtained from individuals, social groups and organizations.

SYA 5355. Comparative Historical Sociology (3). Seminar on methodological issues in historical comparative research, emphasizing principles of research design. Covers techniques such as archival research, analysis of government documents, and the analysis of household census data. Substantive areas may include the family, welfare state, social movements, class relations, and culture.

SYA 5406. Multivariate Analysis (3). Prerequisites: SYA 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). Corequisite: 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 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.

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

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 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.

SYO 5177. Family Demography (3). This course examines the changes in family behaviors and household relationships from a demographic perspective. Materials are drawn not only from demographic literature on the family, but also from sociology, economics and history. The focus is on issues such as union formation and dissolution, family relationships, child-bearing, parenthood, and work, to consider explanations for changing family forms, focusing primarily upon post-World War II America.

Health and Aging

SYA 5326. Injury Epidemiology (3). This course provides a detailed review of the theoretical approaches, methods, and statistical procedures used in the study of human injury. Attention is given to both individual and mass injury and the behavioral and societal factors leading to the risk of injury.

SYA 6912. Epidemiology Research Paper (6). (S/U grade only.) This course provides the student the opportunity to gain practice, under supervision, in conducting an epidemiological research project. The course is taught as an independent directed research project under the guidance of the major professor.

SYD 5134. Environmental Epidemiology (3). This course provides a detailed review of the theoretical approaches, methods and statistical procedures used in the study of the interactions of people and the environment and the effects on human health status. Attention is given to both traditional and emerging concerns related to the environment and the behavioral and societal factors leading to the risk of health problems related to environmental factors.

SYD 5136. Life Course Epidemiology (3). This course integrates classic social epidemiology and life course sociology to account for historical contingencies and individual biographical experience, in addition to current circumstances, to explain social inequalities in the distribution of chronic illnesses and noncommunicable diseases.

SYD 5137. Fundamentals of Epidemiology (3). This course is an introduction to the basic concepts in epidemiology, including measures of disease frequency, and association and study design.

SYD 5138. Infectious Disease Epidemiology (3). This course provides a detailed review of the theoretical approaches, methods and statistical procedures used in the study of infectious disease. Attention is given to both traditional and emerging infectious diseases and behavioral and societal factors leading to infectious disease risk.

SYD 5139. Chronic Disease Epidemiology (3). This course provides a detailed review of the theoretical approaches, methods and statistical procedures used in the study of chronic disease. Attention is given to both traditional and emerging chronic diseases and behavioral and societal factors leading to chronic disease risk.

SYO 5405. Health Institutions and Social Policy (3). This seminar focuses on U.S. health institutions and the forces that shape them. Issues include the role and status of physicians, hospitals, mechanisms of finance, the health care crisis, politics of health and relations to broad social and economic issues, historical and current.

SYO 5416. Stress and Mental Health (3). This course in the sociology of mental health and substance problems focuses on the role of social stress and the stress process. Theories and measurement of disorder and of stress exposure are considered, along with evidence on factors that increase and decrease risk for mental health and substance use problems.

SYO 5426. Gender and Mental Health (3). This course surveys theory and research on gender and mental health, focusing on sociological theory and research on gender differences in mental health problems in the U.S.

SYO 6407. Race, Ethnicity and Health (3). This course reviews current research and theory on the connections between race and/or ethnic status in regard to physical and mental health. Students in the seminar review scholarly work in multiple disciplines and professions to identify empirical trends and theoretical explanations for patterns that these trends reveal.

SYP 5735. Sociology of Aging (3). Seminar analyzes the social institutions that structure the lives of the elderly in modern society. Topics include age status and stratification, labor-force participation and retirement, structures of dependency, political participation and mobilization, and social policy and reform.

SYP 5737. The Dynamics of Aging and Social Change (3). Seminar on the dynamics of aging at various social-organizational levels of analysis. Topics include organizational dynamics of an aging labor force, structural changes relating to morbidity and mortality, and the changing dynamics of group identity formations with a focus on age.

Inequality and Social Justice

SYD 5705. Sociology of Race and Ethnicity (3). This seminar examines sociological concepts and theories utilized to explain dominant-subordinate relations in society. Applies various frameworks to the study of contemporary U.S. ethnic and race relations.

SYD 5817. Contemporary Theories of Gender (3). The course critically examines contemporary gender theories; explores how feminist theorizing affects mainstream social theory; and asks how gender intersects with other forms of structured inequality (race, ethnicity, sexuality, social class). Topics include core themes in gender scholarship; affinities and dialogues with other traditions; origins of feminist theories; conceptualizing gender and the field of gender relations; and theorizing on substantive and political issues.

SYO 5107. Sociology of the Family (3). A survey course on family sociology with a focus on modern U.S. family systems. Course surveys family research and family functioning in modern American society to understand relationships between societal and family conditions and dynamics.

SYO 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 non-market) that foster structured inequalities.

SYO 5376. Sociology of Gender and Work (3). A political-economic analysis of the organization of work, production and reproduction of labor, and linkages between work in the market and work in the home relative to gender. Topics include occupational sex segregation, segmented labor markets, dialectics of paid and unpaid labor, comparable worth, bureaucracy, emotional work, domestic labor, and strategies for change.

SYO 5535. Inequalities: Race, Class, Gender (3). This seminar reviews theories of inequality in contemporary societies. Research on inequality and social mobility in the U.S. and other nations is also reviewed, with a focus on conceptualization and measurement.

SYO 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 5547. Race and Gender in Organizations (3). This seminar examines the forces that create, maintain, and erode inequalities for racial minorities, women, and immigrants in organizations, with an emphasis on work organizations. Course material draws from theory and research sociology, organizational behavior, social psychology, and legal studies.

SYO 6373. Sociology of Work and Labor Markets (3). This seminar examines theories and research about work including new forms of organization and labor markets. Topics include de-industrialization, markets, unions, and professions; internal/external labor markets; work-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 inequality. May be repeated to a maximum of nine (9) semester hours.

SYP 5305. Collective Behavior and Social Movements (3). Seminar on theories and research about collective behavior and social movements. Particular movements are studied relative to competing theories of mobilization.

SYP 5447. Sociology of National Development (3). Seminar on theories, processes, and problems of national development. Considers societal evolution, industrialization, capitalist expansion, modernization, dependency, inequality, and related topics.

SYP 6356. Sociology of the Contemporary Women's Movement (3). Seminar reviews theories of social movements relative to the second wave feminist movement. Issues include labor market/workplace equality, violence against women, economic, political and cultural issues (poverty, family, marriage, sexuality) relative to women's collective organization and mobilizing.

Social Psychology

SYP 5005. Social Interaction (3). This course addresses the three major sociological perspectives on social interaction—symbolic interactionism, dramaturgy, and ethnomethodology—focusing on how these approaches address epistemology, time, interaction rules, intersubjectivity, identity, emotions, language, social organization, micropolitics, inequality, reproduction, and politics and social change.

SYP 5006. Identity and the Self (3). This course focuses on sociological and psychological approaches to self and identity along with the cognitive aspects of the self-concept. This an advanced seminar, so students should have a background in sociological theory and methods, social psychology, and/or methods of social science research.

SYP 5007. Sociology of Emotion (3). This course introduces students to the emerging field of the sociology of emotion and affect. The primary focus is on micro and macro theories of emotion, with some empirical studies read. The course attempts to identify gaps in the literature, generate researchable questions, develop testable hypotheses, and ponder appropriate research designs for the student of emotion.

SYP 5105. Theories of Social Psychology (3). Course examines the major theoretical orientations in contemporary social psychology. Special attention is given to sociologically relevant perspectives such as symbolic interactionism, exchange theory, social learning theory, expectations states/status characteristics theory, emotions work theory, and Goffman's dramaturgical theory.

SYP 5516. Sociological Theories of Deviance (3). A review of the major theoretical perspectives in the sociology of deviance. Anomie, social learning, interactionist, and conflict theories are reviewed and critiqued. The problems and characteristics of deviance theory are considered and new directions for theoretical development are explored.

SYP 5733. Social Psychology of Aging (3). This seminar integrates three areas of research: social psychology, social gerontology, and life course research, with a focus on middle and later life. Topics include health, caregiving, retirement, and family relationships.

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 5645. Critical Thinking and Proposal Preparation (3). This is a course in scientific criticism. Through evaluation of the strengths and weaknesses of grant applications and of published research articles, course participants develop enhanced capacity to conduct funded research and publish the results.

SYA 5907r. Directed Individual Study (3). (S/U grade only.) Prerequisite: 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). (P/F grade only.)

SYA 8962r. Major Area Doctoral Preliminary Exam (0). (P/F grade only.)

SYA 8967r. Preparation for Major Area Preliminary Exam (1-12). (S/U grade only.) A mechanism for graduate students to use in preparing for the required comprehensive exam in their major area of study. May be repeated to a maximum of twenty-four (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). (P/F grade only.) Indicates student has faculty approval for the Doctoral Review Paper.

SYA 8985r. Dissertation Defense (0). (P/F grade only.)

**SPANISH LANGUAGE:
see Modern Languages and Linguistics**

**SPANISH LITERATURE:
see Modern Languages and Linguistics**

Department of SPORT MANAGEMENT, RECREATION MANAGEMENT, AND PHYSICAL EDUCATION

COLLEGE OF EDUCATION

Chair: Cheryl S. Beeler; **Professor:** Imwold; **Associate Professors:** Beeler, Dunn, Fletcher, James, Kent, Lynn, Mondello, Quarterman, Ratliffe; **Assistant Professors:** Kwon, Lee, Rudd, Walsdorf; **Assistants in Leisure and Recreation Services:** Keween, Prince; **Assistants in Physical Education:** Barber, Nobles, Mosier, Mosches, McManus, Reynaud; **Professors Emeriti:** Burton, Cannon, Everett, Fox, Jones, Mundy, 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, and public schools, colleges, and universities. The primary goals of the department are to (a) provide excellence in instruction in preparing qualified professionals; (b) pursue research and other scholarly endeavors that advance the theory and practice in sport settings, 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 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. The degree title appears on the student's diploma, while the major area appears on transcripts.

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 Pre-service 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 non-thesis 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.

An alternate master of science degree with initial certification in physical education is offered for people who already have an undergraduate degree. This two year program including undergraduate and graduate courses will prepare students for a K-12 teaching certification and a master's degree.

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). GRE scores must be submitted in order for an application to be considered complete. Doctoral students must have a master's degree from an accredited institution and present 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 Web site at <http://www.fsu.edu/~smrmpc>.

Definition of Prefixes

PEO—Physical Education Activities (Professional): Land—Object Centered

PEP—Physical Education Activities (Professional): Land—Performance Centered

PET—Physical Education Theory

SPM—Sports Management

Graduate Courses

PEO 5002. Educational Games II (3). Prerequisites: PEO 5042, PET 4051. This course focuses on how to plan for skill development in games stages III and IV through the use of extending, refining, and application tasks. An emphasis is placed on the use of game stages and movement framework as a guide for designing a variety of broad-based games experiences for the middle grade and secondary student. Two models (cooperative learning and sport education) are demonstrated in relation to physical education curricula. Graduate students read and report on the current literature related to teaching game strategies in school settings.

PEO 5042. Educational Games I (3). Co-requisites: PET 4710, 4710L. The purpose of the course is to study the appropriate design of educational game experiences from a developmental curriculum model. Students should be able to articulate research in physical education teacher education related to educational games. Emphasis is on using the content analysis and development system to plan learning experiences for the four developmental stages of games.

PEP 5208. Educational Gymnastics (3). Prerequisites: PET 4710, 4710L. The purpose of this course is to provide the foundational knowledge, practical teaching experience, and current research in the content of educational gymnastics.

PET 5145. Issues in Physical Education (3). A discussion of current issues in physical education.

PET 5155. Current Issues in International Sport (3). As part of the International Program, this course is offered as a means of identifying and discussing current issues that are prevalent in the sport industry at the international level. Issues to be discussed will be identified by the instructor, developed through visits with personnel at international sport organizations, and addressed by students through their daily review of sport industry publications and international sporting news.

- PET 5156. International Sport Venues (3).** As part of the International Program, this course is offered as a means of exposing future sport management scholars and practitioners to the various aspects of sport venues and events in the international sport context. This class provides the students with an opportunity to tour sport venues, meet international sport managers, attend events, and discuss venue and event planning management in the international sport industry.
- PET 5252. Gender Issues in Sport and Physical Activity (3).** Post-structural 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 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 5514. Developing Electronic Teaching Portfolios in Physical Education (3).** In this course, students will develop an electronic teaching portfolio to document the growth and development toward the NASPE Advanced Program Standards.
- PET 5516. Assessment in K-12 Physical Education (3).** This course increases students' knowledge of performance-based assessment related to teaching K-12 physical education. Students focus on four primary themes as a theoretical basis for improving student assessment: 1) using assessment to drive instruction; 2) assessing content across the psychomotor, cognitive, and affective domains of learning; 3) using assessment in ways that allow students to apply information and perform competently; and 4) using a balanced approach when selecting assessment strategies. Students apply concepts from these themes into a field experience component and therefore must have access to a K-12 physical education class to teach.
- PET 5535. Research Methods (3).** Methods and techniques used in research in physical education including library materials and writing techniques.
- PET 5645. Programs in Adapted Physical Education (3).** Problems in developing and implementing adapted physical education programs in the public schools, private schools, and postsecondary institutions.
- PET 5715. Effective Teaching in Physical Education (3).** Pedagogical knowledge and skills related to the generic aspects of effective instruction as applied to physical education.
- PET 5716. Analysis and Observation of Teaching in Physical Education (3).** Examines teaching and managerial behaviors related to psychomotor learning, presents activity-based teacher observation instruments, provides guidelines for the systematic development of instructional skills.
- PET 5717. Models in Teaching Physical Education (3).** Theory and practice in teaching strategies designed to facilitate learner achievement in the cognitive, affective, and psychomotor domains.
- PET 5718. Interdisciplinary Teaching (3).** This course provides an in-depth study of the fundamentals of interdisciplinary programs. The course focuses on connected, shared and partnership teaching models that can be used as guides for organizing content, collaborating with others and creating meaningful activities that impact student learning. The course also explores strategies for implementation, including ideas for getting started, selecting a teaching model, developing lesson plans, assessing interdisciplinary learning using alternative strategies and building a support network.
- PET 5774. Methods and Materials of Teaching Fitness, K-12 (3).** This course focuses on how to implement a lifetime, health-related physical fitness program in school and community settings. Students improve their knowledge of fitness concepts, design learning activities, review the research on physical activity, and develop strategies to research and teach lifetime fitness to children and adolescents.
- PET 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 6495. Seminar in Sport Ethics (3).** This course assists students in self-evaluating, examining, and developing philosophical and moral reasoning skills. Major moral/ethical theories and frameworks outside and pertaining to sport are researched and discussed. Students experience the ethical decision-making process through opportunities for critical thinking.
- PET 6506. Seminar in Sport Finance (3).** This course assists doctoral students in understanding the contemporary trends in finance and sport finance research. In addition, major financial frameworks related to and outside of sport are researched and discussed.
- 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 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).** (P/F grade only.) Examination for doctoral students to determine eligibility to continue in the program.
- PET 6980r. Dissertation (1-12).** (S/U grade only.)
- PET 8964r. Preliminary Doctoral Examination (0).** (P/F grade only.)
- PET 8966r. Master's Comprehensive Examination (0).** (P/F grade only.)
- PET 8968r. Specialist in Education Comprehensive Examination (0).** (P/F grade only.)
- PET 8976r. Master's Thesis Defense (0).** (P/F grade only.)
- PET 8977r. Specialist in Education Thesis Defense (0).** (P/F grade only.)
- PET 8982r. Dissertation Defense (0).** (P/F grade only.)
- SPM 5106. Facility Management in Sport (3).** Study of sport/multi-purpose public assembly facility management. Includes design, planning processes, funding, construction, and maintenance.
- SPM 5116. Strategic Management for Sport Organizations (3).** This course examines the fundamentals of strategic management theory important for effective leadership in the sport industry.
- SPM 5156. Athletic Administration (3).** Designed to provide information regarding the various components and activities in the organization and administration of athletic programs for prospective athletic administrators.
- SPM 5308. 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.
- SPM 5405. Sport and the Media (3).** This course examines the unique role and impact of the media on the sport industry. Identification of the grand spectrum of activities and mediums comprising the media is explored. The ever-growing role of the print, radio and television broadcast, and the Internet are investigated. This course also orients students to the academic and professional literature accessible in the field of sport management. Experienced practitioners are invited as guest lecturers to enhance assigned textbook and journal readings.
- SPM 5508. Fiscal Management in Sport (3).** Course covers principles and factors involved in the fiscal management of athletic/sports programs. Addresses purchasing, budgeting, risk management, operational procedures, and auditing guidelines.
- SPM 5706. NCAA Compliance and Institutional Control (3).** Prerequisite: PET 5476. Course prepares students for current NCAA rules, policies, enforcement procedures and compliance strategies.
- SPM 5716. Risk Management in Sport and Physical Activity (3).** The course provides a comprehensive overview to risk management in sport and physical activity. The identification, evaluation, and control of loss to personal and real property, clients and students, employees and the public are addressed. Loss may result in injury, death, destruction of property, financial failure, or harm to reputation. Students will become familiar with systems used in assessing risk in the sport industry.
- SPM 5726. Issues in Sport Law (3).** An integration of the various areas involved within sport pertaining to the legal liability of coaching, facility management and risk management.
- SPM 6006. 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.
- SPM 6007. 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.
- SPM 6008. Foundations in Sport Administration (3).** This course will examine the role and impact of the sport industry and help students identify activities and opportunities in sport management, as well as orient new graduate students to the academic and professional field of sport management.
- SPM 6156. Seminar in Administration of Physical Education and Athletics (3).** Prerequisite: 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.
- SPM 6309. Seminar in Sport Marketing (3).** Emphasis is on discussion and critical analysis in sport marketing theory, research, education, and current issues relative to social, cultural, political, and ethical issues in sport marketing.
- SPM 6728. 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 statutes, sexual harassment and risk management also will be addressed. Students will select two topics for in-depth analysis.

RECREATION AND LEISURE SERVICES ADMINISTRATION

Coordinator: Joohyun Lee

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, deci-

sion 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; festival and event companies; 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 faculties 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 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 (400 minimum) and quantitative (400 minimum) portions of the Graduate Record Examinations (GRE). Final selection decisions are determined by examining a composite of all the above information. GRE scores must be submitted for an application to be considered complete.

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, Florida State University, Tallahassee, FL, 32306-4280* or call (850) 644-4813.

Degree Requirements

The minimum number of semester hours required to earn a non-thesis 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, 5054, or 5305. Those interested in the public administration certificate may use elective hours to take PAD 5035, 5050, 5106, 5227, and 5417. Students who want the aging studies certificate may use elective hours to take ISS 5945, SOW 5646, SYA 6933, and SYP 5733.

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 Prefix

LEI—Leisure

Graduate Courses

LEI 5171. Philosophical, Social, and Behavioral Foundations of Leisure (3). An overview of philosophical, environmental, social, and psychological phenomenon of leisure and recreation such as socialization, motivation, attitude, satisfaction, boredom, and wellness. Scientific and philosophical explanations will be used.

LEI 5185. Current Issues in Leisure (1). Addresses the current issues facing the profession and the practitioner of leisure services.

LEI 5316. Event Planning Management (3). This is an advanced course in event management focusing on managerial aspects of event operations such as economic impact, assessment, infrastructure, safe operations, staging and production, food and beverage operations, vendors, and volunteers.

LEI 5317. Event Management Issues in Ethics and Risk Management (3). This advanced course in event management focuses on issues and considerations in event planning ethics, risk management, and safety.

LEI 5530. Problems of Staff Development (3). An in-depth analysis of the issues and problems related to working with staff members. Designed to enhance the skills and knowledge necessary to successfully motivate, train, appraise performance, and compensate staff members.

LEI 5555. Analysis and Management of Leisure Systems (3). Analysis and evaluation of leisure systems, operations, programs, personnel, and fiscal resources from a quantitative and qualitative perspective.

LEI 5563. Event Marketing (3). This is an advanced course in event marketing that focuses on the components required for development of marketing plans for the various venues in the special events industry, including sponsorship acquisition.

LEI 5576. Fiscal Policy and Management of Leisure Systems (3). Analysis of financial management policies and practices of leisure delivery systems.

LEI 5815. Leisure Education (3). Develop the knowledge and skill to enable student to conceptualize and design programs, services, and strategies to educate public for leisure.

LEI 5889. Research in Leisure Services (3). Critique of research, the sources and skills of constructing research designs.

LEI 5908r. Directed Individual Study (1-3). May be repeated to a maximum of twelve (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 5942. Practicum in Events Management (3). Prerequisites: LEI 5316, 5317, 5563. This course provides students with an opportunity to apply knowledge, skills, and attitudes developed during their academic preparation. It is also aimed at helping students gain valuable experience in management of events. Students complete a minimum of 150 hours over an extended period of time, but not less than twelve (12) weeks.

LEI 5944r. Fieldwork in Leisure Services (1-3). Designed to provide the student an opportunity to gain practical experience by working in a leisure setting. May be repeated to a maximum of six (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). (P/F grade only.)

LEI 8976r. Master's Thesis Defense (0). (P/F grade only.)

SPORTS PSYCHOLOGY: see Educational Psychology and Learning Systems

Department of STATISTICS

COLLEGE OF ARTS AND SCIENCES

Chair: Dan McGee; **Director, Statistical Consulting Center:** Ramsier;
Professors: Hollander, Huffer, McGee, Niu; **Associate Professors:**
Bunea, Patrangenaru, Song, Srivastava, Wegkamp; **Assistant
Professors:** Chicken, Dixon, Wu; **Assistant in Statistics:** Bose;
Professors Emeriti: Leysieffer, Marsaglia, Meeter, Sethuraman;
Associate in Statistics: Ramsier

The Department of Statistics offers programs leading to the master of science (MS) in Statistics, the MS in Biostatistics, and the doctor of philosophy (PhD) degrees. Emphases in probability theory and stochastic processes, mathematical statistics, biostatistics, 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 in Statistics 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. For more information, including revisions or additions to options and programs, please contact the department by phone at (850) 644-3218, or visit the departmental Web site at <http://stat.fsu.edu>.

The MS program in Biostatistics prepares students for future careers in private and public sector research and health care settings. Students gain the ability to apply statistical principles, processes, applications, and analytic methods to design, implement, and analyze health related studies including both experimental (clinical trials) and observational (epidemiological) studies. The degree requirements include course work in biostatistics and statistical theory and methods.

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 non-majors with minimal background in mathematics. Course outlines for recent offerings of these courses are available on the departmental Web site.

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 Institutes 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 probability 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 1100 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 biostatistics, which results in an MS in Biostatistics degree. No comprehensive examination is required.

OR

3. Undergraduates may enroll in a 5-year combined BS/MS degree, which requires no comprehensive examination.

OR

4. 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 on the department's Web site. 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 lan-

guage 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 toward 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 experience; 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 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, nonlinear 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.

STA5172. Statistics for Epidemiology (3). Prerequisite: STA 2171. This course introduces the statistical methods developed for and used in epidemiology. Topics to be covered include statistical design issues in epidemiological studies, measures of disease occurrence, measures of association, and adjusting for confounding without and with multivariate models.

STA 5176. Statistical Modeling with Application to Biology (3). Prerequisites: STA 4442 or 5440. Maximum likelihood principle, missing data and EM algorithm; assessment tools such as bootstrap and cross-validation; Markov chain and hidden Markov models; classification and regression trees (CART); Bayesian models and Markov Chain Monte Carlo algorithms.

STA 5179. Applied Survival Analysis (3). Prerequisite: STA 2171. This course is an applied introduction to survival analysis, one of the most commonly used analytic tools in biomedical studies. Topics to be covered include censoring and time scale, descriptive methods, parametric methods, and regression methods, which stress the proportional hazards model.

STA 5206. Analysis of Variance and Design of Experiments (3). Prerequisite: One of STA 2122, 4322, or 5126. Graduate credit for non-statistics majors only. One and two-way classifications, nesting, blocking, multiple comparisons, incomplete designs, variance components, factorial designs, confounding.

STA 5207. Applied Regression Methods (3). Prerequisite: One of STA 2122, 4322, or 5126. Graduate credit for non-statistics majors only. General linear hypothesis, analysis of covariance, multiple correlation and regression, response surface methods.

STA 5208. Linear Statistical Models (3). Prerequisite: STA 5327.

STA 5225. Sample Surveys (3). Prerequisite: A course in statistics above STA 1013 or consent of instructor. Simple, stratified, systematic, and cluster random sampling. Ratio and regression estimation. Multistage sampling.

STA 5238. Applied Logistic Regression (3). Prerequisite: STA 2171. This course is an applied introduction to logistic regression, one of the most commonly used analytic tools in biomedical studies. Topics include fitting the model, interpretation of the model, model building, assessing model fit, model validation, and model uncertainty.

STA 5244. Clinical Trials (3). Prerequisite: STA 2171. This course offers an introduction to clinical trials. Topics to be covered include defining the research question, basic study designs, randomization, blinding, sample size, baseline assessment, data collection and quality control, monitoring, issues in data analysis, closing out a trial, reporting and interpreting results, and issues in multicenter trials.

STA 5323. Introduction to Mathematical Statistics (3). Prerequisite: MAC 2313 or equivalent. Distributions of random variables, conditional probability and independence, multivariate distributions, sampling distributions, Bayes' rule, counting problems, expectations.

STA 5325. Mathematical Statistics (3). Prerequisites: STA 4442 or 5440 and either MAC 2313 or STA 5326. Sufficiency, point estimation, confidence intervals, hypothesis testing, regression, linear models, Bayesian models.

STA 5326. Distribution Theory and Inference (3). Prerequisite: MAC 2313; at least one previous course in statistics or probability. Introduction to probability, random variables, distributions, limit laws, conditional distributions, and expectations.

STA 5327. Statistical Inference (3). Prerequisites: STA 5326, 5446. Statistical inference viewed at a measure-theoretic level.

STA 5334. Limit Theory of Statistics (3). Prerequisite: STA 5327. Convergence of distribution and random variables, laws of large numbers, central limit theorems, asymptotic distributions, asymptotic efficiency, rates of convergence, the weak invariance principle.

STA 5440. Introductory Probability I (3). Prerequisite: MAC 2311. Random variables, probability of random variables, generating functions, central limit theorem, laws of large numbers.

STA 5446. Probability and Measure (3). Prerequisites: MAA 4227, 5307, or the equivalent. Classes of sets, probability measures, construction of probability measures, random variables, expectation and integration, independence and product measures.

STA 5447. Probability Theory (3). Prerequisites: STA 5326, STA 5446.

STA 5507. Applied Nonparametric Statistics (3). Prerequisite: A course in statistics above STA 1013 or consent of instructor. Applications of nonparametric tests, estimates, confidence intervals, multiple comparison procedures, multivariate nonparametric methods, and nonparametric methods for censored data.

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 5938. Topics in Medical Consulting (3). Prerequisite: STA 2171. This is a "hands-on" course in consulting. Two to four reasonably complex problems are identified each time the course is offered, the investigators present the problem to the class. Statistical topics covered in class are those identified by the class as required to solve the problems presented.

STA 5939. Introduction to Statistical Consulting (3). (S/U grade only.) 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 6174r. Advanced Methods in Epidemiology (3). Prerequisites: STA 5167, 5325. This course presents advanced methods for describing, analyzing, and modeling data from observational studies. The initial offering includes introductions to meta-analytic methods, bootstrap methods, and randomization tests. Topics vary with each offering. May be repeated up to a maximum of six (6) semester hours.

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, including geostatistical data, lattice data and point patterns. Theory and applications of basic principles and techniques.

STA 6906r. Directed Individual Study (1–12). (S/U grade only.) May be repeated.

STA 6980r. Dissertation (1–12). (S/U grade only.)

STA 8964. Preliminary Doctoral Examination (0). (P/F grade only.)

STA 8966. Master's Comprehensive Examination (0). (P/F grade only.)

STA 8976. Master's Thesis Defense (0). (P/F grade only.)

STA 8985. Defense of Dissertation (0). (P/F grade only.)

**SURVEYING AND RELATED AREAS:
see Civil and Environmental Engineering**

**TAX ACCOUNTING:
see Accounting**

**TEACHING ENGLISH AS A SECOND LANGUAGE:
see Middle and Secondary Education**

Department of TEXTILES AND CONSUMER SCIENCES

COLLEGE OF HUMAN SCIENCES

Chair: Joe Nosari; **Professors:** Cloud, Goldsmith, Moore; **Associate Professors:** Fiorito, Grise, Heitmeyer, Sullivan; **Assistant Professors:** Black, E. Kim, S. Kim, Lee; **Associate in Merchandising:** McLaughlin; **Assistant in Residential Science:** Hattaway; **Professors Emeriti:** Adam, Avery, Davis, Edgeworth, Kittles, Kuehne, Warden; **Eminent Scholar:** Susan Watkins

Through advanced study and research, graduate programs in the Department of Textiles and Consumer Sciences contribute to meeting the needs of individuals, families, and communities for fashionable and functional apparel and textile products, profitable retail businesses, and successful residential environments.

The department offers graduate programs leading to the master of science (MS) degree with thesis and course work options in the following areas of emphasis: textiles, retail merchandising, apparel product development, creative design, global product development, and residential science. The department also participates in the doctor of philosophy (PhD) degree in human sciences with specializations in merchandising, apparel product development, and textile product performance.

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.

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.

Financial Aid

To allow qualified students to pursue graduate degrees, teaching and research assistantships and college and University fellowships are available on a competitive basis. Application materials should be submitted to the department by January 1st to ensure consideration for the 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, Florida State University, Tallahassee, FL 32306-1046.*

Master of Science Programs

Master of Science students receive professional preparation for careers in the textile, apparel, retail and housing industries. Two types of master's programs are available: thesis and non-thesis (course work only). The thesis master's degree provides a strong foundation for doctoral study.

Thesis Programs

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.

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 within or outside the department. Final approval of the

program of study rests with the supervisory committee. Students without an undergraduate degree in the field will be required to take additional leveling courses.

Textiles

Graduate students in textiles focus their studies on the performance properties of textiles and the effect of these properties on product development and wear satisfaction. 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 planning and analysis of financial performance of small business, emerging technologies in retailing, patronage and shopping behavior, 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 functional apparel.

Residential Science

The emphasis in residential science addresses the effect of the housing environment on human health and well being and the application of business and human behavior principles to the development and management of single and multifamily housing. Research in this area addresses issues in residential property management, residential development, and satisfaction with housing choices.

Historical Clothing and Textile/Museum studies

Students in this program focus on the management, conservation, and display of historic clothing and textiles. Students completing this course work will also obtain a Graduate Certificate in Museum Studies.

Course Work Programs

Course work (non-thesis) programs require a minimum of thirty-nine (39) graduate semester hours. Students without appropriate background course work 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 or a merchandising research project. The program of study provides advanced course work 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. This program prepares students from varying backgrounds for careers in retail management or buying, or with firms providing retail analysis services.

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 course work or experience in apparel design will be required to complete additional undergraduate or graduate courses, extending the program by at least one additional year. Students with an apparel design background can typically complete the program in a year and a half. The added experience strengthens the student's design portfolio, increasing their employment opportunities in the apparel industry.

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 course work will be required to complete additional undergraduate or graduate courses.

Residential Science

Students in the residential science emphasis complete advanced course work in housing, including a Graduate Certificate in Residential Development. The program explores theories and trends regarding the overall housing industry from conception to construction. In addition, students are introduced to the development process with an in-depth look at how projects get started—the “due diligence” phase. Through the practicum, students also have an opportunity to get hands-on field experience.

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, apparel product development, and textile product performance.

Doctoral students conduct research under the mentorship of outstanding faculty who are known nationally and internationally for their scholarly contributions to technological advances in retail management/buying, innovative and sustainable retail strategies, emerging consumer purchase/shopping patterns, design/evaluation of innovative apparel products, and performance assessments of high-tech textiles.

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.

The preliminary exam, taken when all but nine (9) semester hours of course work are complete, provides another opportunity for the committee to assess the student's preparation to enter the research phase of the program. Students who do not exhibit adequate preparation may have courses added to their program of study.

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 Prefixes

COA—Home Economics: Consumer Economics

CTE—Home Economics: 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; a course in economics. 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, 3734. The fundamentals of draping on the human form as a method of apparel design. (Fall semester only.)

Graduate Courses

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). (P/F grade only.)

COA 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

COA 8976r. Master's Thesis Defense (0). (P/F grade only.)

COA 8985r. Dissertation Defense Examination (0). (P/F grade only.)

CTE 5426r. Recent Developments in Textiles (3). Prerequisite: previous textile course work. This course offers in-depth analysis of current, specialized topics in textiles with a focus on economics, environmental, and technological factors related to textiles and apparel production.

CTE 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 5538. Historic Textiles and Clothing Collection Management (1–4). Prerequisite: Permission of instructor. Practicum at Florida State University Historic Clothing and Textiles Collection. Students will learn proper textile preservation, conservation, storage and display techniques for flat textiles and garments. Other experiences may include museum education, informatics, and data base management. This course may be repeated to a maximum of six (6) semester hours.

CTE 5706. Creativity: Consumer Product Development (3–4). Processes and techniques to stimulate and develop creativity from a multidisciplinary approach for the development of new consumer products.

CTE 5709r. Apparel Design Concepts (2–4). This course provides graduate students with accelerated concepts and skill development in apparel design. Specifically, this course provides a customized plan for Individual students in apparel construction, Illustration and pattern-making concepts. Course is repeated as needed to acquire all competencies. May be repeated to a maximum of twelve (12) semester hours.

CTE 5729r. Experimental Clothing Design (3–4). Prerequisites: CTE 3341, 3734, 4752. A theoretical and practical approach to designing fashionable and functional clothing. May be repeated to a maximum of twelve (12) semester hours.

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 5768r. 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 5769r. Functional Apparel Design (3–4). Prerequisite: apparel construction, illustration, patternmaking. Critical analysis and prototype development to meet the special demands of functional and special needs clothing. Students registered for four credits must submit a design to a functional design competition. May be repeated with Instructors permission to a maximum twelve (12) semester hours.

CTE 5776. Advanced Computer Applications in Apparel Design (3–4). Prerequisites: CTE 3734, 3742. This course focuses on the use of the computer as a tool to conceptualize apparel design ideas and create original artwork, patterns, and markers.

CTE 5785. Apparel Manufacturing Issues (3–4). Analysis of clothing manufacturing and the decision-making involved in the production of apparel.

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 5807. Retail Merchandising Concepts (2–4). Prerequisites: MAC 1105, MGF 1106, or MGF 1107. This course is designed to give graduate students an accelerated overview of basic concepts and principles in the merchandising field. Students who have taken CTE 3806 and CTE 4822 are not eligible to enroll in this course. Specifically, this course will (1) provide an overview of every aspect of the retailing industry including historical perspectives, analysis of the decades of the twentieth century, the various materials used by fashion innovators, the design process of apparel and accessories, the roles played by the ancillary arms of the industry, and the marketing of collections, and (2) examine the principles of effective quantitative merchandising management.

CTE 5815r. Retail Technologies (3). In-depth study of the principal retail technologies and systems currently being developed and used for internal retail management and for global supply chain management. May be repeated once as course content changes, with permission from the instructor.

CTE 5816. Merchandising Organization (3). Prerequisites: CTE 4822; MAR 3023, or their equivalents. Synthesis of knowledge concerning retail merchandising emphasizing organizational structure and operational methods.

CTE 5828. Merchandising Buying (3). Prerequisites: CTE 4822; MAR 3023, or their equivalents. Techniques and theories of retail buying with emphasis on the buyers retail management role.

CTE 5833. 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 5945r. Museum Studies Internship (1-6). Prerequisites: CTE 3515 or CTE 3516. Internship at an institution approved by the Museum Studies program. The emphasis must be on historic clothing, textiles, or accessories. The experience provides an opportunity to apply and expand knowledge in areas of museum studies such as storage, display, education, informatics, and management. May be repeated to a maximum of six (6) 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 (1-6). Advanced study of selected topics in textiles, merchandising, or apparel product development with emphasis on problem analysis and resolution. May be repeated when topics vary. May be repeated to a maximum of twelve (12) semester hours.

CTE 6980r. Dissertation (1-24). (S/U grade only.)

CTE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

CTE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

CTE 8976r. Master's Thesis Defense (0). (P/F grade only.)

CTE 8985r. Dissertation Defense (0). (P/F grade only.)

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 8976r. Master's Thesis Defense (0). (P/F grade only.)

HOE 6938r. Proseminar in Home Economics (1). (S/U grade only.) Doctoral students only. Repeatable up to a maximum of two (2) semester hours.

School of THEATRE

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Chair: C. Cameron Jackson; **Professors:** Chappell, Dahl, Jordan, Judy, Leahy, Muscha, Redmond, Richey, Wallace; **Associate Professors:** Cooper, Gelabert, Hogan, Jackson, Lickson, Sandahl; **Assistant Professors:** Baldyga, Bollinger, Coleman, Ek, Hale, Osborne, Ossowski, Verdugo; **Burt Reynolds Eminent Scholar Chair in Theatre:** TBA; **Hoffman Eminent Scholar Chair in Theater:** TBA; **Professor Emeritus:** Fallon

The School of Theatre is one of the largest and most comprehensive theatre-training programs in the United States. The first program in Florida to hold such distinction, the school is accredited by the National Association of Schools of Theatre and is a founding member of the University/Resident Theatre Association. At Florida State

University, actors, directors, designers, technicians, managers, teachers, and scholars learn by working with gifted faculty in a professionally oriented school environment. In realizing its educational mission, the school contributes to the cultural life of the University, the Tallahassee and Sarasota communities, and the state by creating an array of productions reflecting the full range of dramatic literature. From Shakespeare to Chekhov to Rogers and Hammerstein to world premieres, performances give audiences and participating students the opportunity to share the unique experience of the living theatrical event. Classroom experiences are enriched by the challenge of faculty, students, and visiting artists working side-by-side to create fine theatre.

The School of Theatre's graduate FSU/Asolo Conservatory for Actor Training is located in Sarasota at the Florida State University Center for the Performing Arts. This exemplary master of fine arts program in acting is operated in conjunction with the Asolo Theatre Company, a LORT professional theatre. The conservatory and the Asolo Theatre Company are both housed in a beautiful 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 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 pre-set lightboard, a single channel sound system, a light and sound control booth, green room, two group dressing rooms, and a small scene shop. The auditorium is used as a lecture classroom and demonstration laboratory by the School of Theatre.

The **Lab** is located at 502 South Copeland Street. The Lab is flexible theatre space used in proscenium, thrust, arena, and open configurations. There is a variable seating capacity depending on each production's staging requirements. There is a lighting grid, and portable sound

and lighting equipment is utilized. Subscription-season productions are mounted in the Lab Theatre each year. In addition, the space is used for student development and productions. There is an accompanying rehearsal hall next door.

The **Fine Arts Annex Theatre**, located at *117 Fine Arts Annex*, is a small proscenium space with flexible seating. The room is used as a classroom space, rehearsal space, and as a performance space for student productions.

Master of Arts/Master of Science

The master of arts/master of science (MA/MS) program in theatre at Florida State University offers students the opportunity to work with outstanding faculty in a flexible curriculum that combines scholarship and production work. Classes at the graduate level are small, enabling students to have direct contact with professors, contribute extensively in discussion, and do significant projects, reports, and papers.

The MA/MS program has been designed for both students who desire a foundation for the PhD, and are interested in teaching at the secondary school or junior college level, or for those students desiring a general graduate theatre education but are uncertain about pursuing the MFA or the PhD.

The MA is recommended for students who may wish to pursue a PhD, while the MS program is intended for the working theatre educator. The MA provides the option of writing a thesis, and has a foreign language requirement.

Admission

Admission to the MA/MS program in the School of Theatre is based upon the following criteria: undergraduate GPA, Graduate Record Examination (GRE) scores, three letters of recommendation, a scholarly writing sample, and a statement of purpose. Any exemption from these requirements must be requested in writing from the Director of Graduate Theatre Studies, and the Associate Dean for Academic and Students Services of the School of Theatre.

Master of Fine Arts

The master of fine arts (MFA) degree is a course of study leading to a terminal artistic degree in theatre arts. The objective of the program is to provide students with competencies appropriate to the needs of professional theatres in America; only secondarily does this program prepare teachers. The goals of the program are to 1) ensure opportunities for mastering the application of theory and skills by practicing a professional specialization; 2) encourage on-the-job training in actual working conditions; and, 3) provide a general background in theatre history and practice.

Admission

Students admitted to an MFA program must meet the University admission policies for graduate studies, must have a baccalaureate degree in theatre or its equivalent from an accredited institution, and must offer evidence of a high degree of creative ability in their area of specialization.

Residency

A student must be enrolled full-time in graduate study for a minimum of four semesters. A minimum of sixty (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 toward the MFA at Florida State University is the practicum program. Practicum acknowledges the legitimacy of unique artistic production-oriented work not affiliated with classroom course work. The practicum program allows students and their advisers to plan and execute an individualized track to meet students' particular needs and desires. The specific content of each practicum is determined in advance and entered on the student's progress check list. This contractual agreement is evaluated by the MFA faculty each semester.

icum is determined in advance and entered on the student's progress check list. This contractual agreement is evaluated by the MFA faculty each semester.

Review

A faculty committee meets with each student every regular semester to evaluate the student's progress. Individual program advisers report on their students in terms of attitude, class work, production assignments, projects, artistic growth, conduct, and professional potential. Any faculty members who have worked with MFA students may submit relevant information. The results of the review are part of the student's file.

Internship

Internships provide students with the opportunity to gain experience in their particular field by working under the supervision of recognized professionals. Resident internships must be arranged with the student's program director. The student is responsible for providing progress reports and a full evaluation from the internship supervisor before grades can be assigned. Internships may be arranged to a maximum of thirty (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.

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 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 young professionals in the art and craft of lighting design. This training is uniquely designed to prepare young professionals for careers in theatrical, entertainment, architectural, and industrial lighting. A major focus of the program is to develop designers with a strong sense of professionalism and artistic integrity.

The MFA Program is designed to give students skills that will enhance their growth as artists and practitioners through a combination of studio classes, one-on-one mentoring, and practicum assignments. Traditional design practices are combined with new technology and innovations to give the student the best preparation possible for work in the professional world. Emphasis is placed on visual and verbal presentation techniques, as well as communication, analytical, and collaborative skills. Course work in theatre history and literature is encouraged to help students develop enlightened design aesthetic. All students have the opportunity to practice their craft by designing numerous productions and participating in all phases of the production process while attending Florida State University.

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.

Note: The PhD program is not currently accepting applications.

Definition of Prefixes

THE—Theatre Studies and General Resources

TPA—Theatre Production and Administration

TPP—Theatre Performance and Performance Training

Graduate Courses

THE 5084r. Theatre Problems (3). Topics change each semester depending upon instructor. May be repeated to a maximum of six (6) semester hours.

THE 5120. Advanced Theatre History I: Classical and Medieval (3). This course examines the origins of theatre: Classical Greece and Rome; Japanese Kabuki/Noh/Bunraku; Medieval Europe.

THE 5130. Advanced Theatre History II: Renaissance and 18th Century (3). Topics in this course include Neoclassicism, Elizabethan/Jacobean, Spanish Gold Age, Restoration, Decline of Neoclassicism, and Germany.

THE 5160. Advanced Theatre History III: 19th and 20th Centuries (3). Topics in this course include Romanticism, Realism, Modernism, Postmodernism, and Postcolonialism.

THE 5238. History of African-American Drama (3). A survey of the history of African-Americans in the American theatre from the African Grove Theatre to the present, and of playwrights from William Wells Brown to August Wilson.

THE 5246. Musical Theatre History I (3). This course traces the development of the musical from its European origins to 1943. Students establish familiarity with a wide range of the repertoire of the earlier musical theatre.

THE 5247. Musical Theatre History II (3). The development of the American musical, in its cultural, theatrical and social context, from 1943 to the present is examined in this course. The elements of musical theatre and the various ways these elements are used in different types of musicals in various periods are explored.

THE 5265r. Historic Costume II (3). Prerequisite: THE 4260. Advanced study of selected periods of costume history and its relationship to the theatrical costume. Periods covered will include both western and nonwestern dress. May be repeated to a maximum of six (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 playwright written by women of color, by white women, and by one African-American male.

THE 5439. African Theatre and Performance (3). Through an exploration of 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 5770. Theatre History and Literature I for Theatre Educators (3). Explores the staging practices and dramatic literature of classical Greece and Rome, medieval Europe, the Renaissance, 18th-century Europe, and classical Japan. The course emphasizes the realization of the plays in performance in both historical and modern contexts.

THE 5771. Theatre History and Literature II for Theatre Educators (3). Explores the staging practices and dramatic literature from the 18th-century to the present. Specific units include romanticism, melodrama and popular culture, the rise of realism, avant-garde theatre movements, the musical, European and American innovations 1960s–1990s, and contemporary dramatic theory.

THE 5765. Performance I for Theatre Educators (3). This course instructs secondary education faculty in the crafts of acting and directing through a variety of practical exercises. At completion, students should be able to demonstrate the skills and abilities to guide their own students in the basics of acting and directing.

THE 5772. Theatre History and Literature III for Theatre Educators (3). This course works to familiarize the students with a wide range of contemporary plays and situate the plays in the sociopolitical contexts in which they were produced. Although plays from various world cultures will be read, the course emphasizes multicultural dramatic literature of the United States.

- THE 5905r. Directed Individual Study (1-3).** (S/U grade only.) May be repeated to a maximum of twelve (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 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).** (P/F grade only.) Taken within the first five semesters of residency; shows that student is qualified to continue program successfully. Form varies with discipline and skills being demonstrated. May be repeated with consent of program director.
- THE 8964r. Preliminary Doctoral Exam (0).** (P/F grade only.) Taken after student has taken or is registered for a minimum of forty-eight (48) hours.
- THE 8966r. Master's Comprehensive Examination (0).** (P/F grade only.) Normally taken the last semester of course work.
- THE 8976r. Thesis Defense (0).** (P/F grade only.)
- THE 8978. Defense MFA Degree (0).** (P/F grade only.) Form varies; may include portfolio review or vita presentation. Taken during one of the last two semesters of residency.
- THE 8985r. Dissertation Defense (0).** (P/F grade only.) Taken on completion of dissertation and within five years of passing preliminary examinations.
- TPA 5015. Stage Machinery Design and Construction (3).** A skills-development course covering the process of designing and building mechanical effects for the stage. Areas to be studied include basic physics, hydraulics and pneumatics, electro-mechanics, and control systems, as well as a systematic approach to machinery design. This study leads to the public presentation of a fully realized, practical final project.
- TPA 5016. Model Making (3).** The purpose of this course is to acquaint students with current model building techniques and systems. Students will gain experience in constructing most of the elements closely associated with models such as doors, windows, textures, fences, trees, and props.
- TPA 5025. Lighting Design I (3).** This course acquaints students with the design process and the various tools by which lighting designers research and express their art. The course includes script analysis, producing light plots, and basic drafting.
- TPA 5026. Lighting Design II (3).** This course is an overview of the lighting design process for a variety of spaces from concept to finished product. Emphasis is on script analysis. Content includes instruction in the creation and use of paperwork, as well as practical aspects of lighting for both proscenium and non-proscenium venues.
- TPA 5027. Lighting Design III (3).** This course encompasses lighting design for a variety of production styles such as musicals, opera, dance, comedy and tragedy.
- TPA 5028. Lighting Design IV (3).** This course consists of intensive study in research, process, script interpretation and design presentation. Emphasis is placed on problem solving and professional conduct.
- TPA 5029. Lighting Design V (3).** The content of this course centers on non-theatrical lighting, including tours, industrials and architectural, as well as cross-over areas of projection, sound and video. Emphasis is on how the implementation of this technology affects design approaches.
- TPA 5042r. Advanced Costume Design for the Stage (3).** An advanced exploration into the costume design process for the theatre, including researching, script analysis, design problems, and the costume designer's role throughout the production process. May be repeated once when content varies to a maximum of six (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 5089r. Advanced Technical Theatre: Problems in Scene Painting (3).** Painting scenery for the stage; handling of various paint media; effects of lighting on colors. Intensive study of master draftsmen and artists and ways of imitating artistic styles on stage. Consent of instructor required.
- TPA 5098. Theatrical Design for Theatre Educators (3).** A study of the principles and elements of design and how they are applied to scenery, costume and lighting design.
- TPA 5203. Drafting (3).** Familiarizes the theatrical design student with the drafting principles and accepted practices of theatrical design and technology. Projects will include isometric and orthographic projection, shop drawings, rear elevations, sections, ground plans, and drop point perspective.
- TPA 5207. Technical Direction (3).** A seminar type of course addressing the technical management techniques and graphic presentation skills required of the technical director in a variety of situations.
- TPA 5213. Stage Rigging (3).** A studio course introducing the equipment, materials, and the standard professional techniques required for safe and efficient stage rigging utilizing both hemp and counterweight rigging systems.
- TPA 5227. Theatrical Lighting Technology (3).** This course explores a variety of practical skills and tools that are necessary for a career as a master electrician, 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 light-packs 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 throughout history. Students gain practical 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 5284. Technical Production (3).** This course examines the production process from play selection through set design, set load in, run of show, load out, and post-modern analysis. Focus is on the various and linear aspects of production, including the management and planning of the budgeting, pre-construction, construction, run of show, and strike.
- TPA 5285. Technical Production and Management (3).** Prerequisite: TPA 5207 or instructor 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 twenty-four (24) 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 5306. Structural Design for the Stage II (3).** This course is a continuation of the concepts and material covered in TPA 5310 (Structural Design for the Stage I).
- TPA 5310. Structural Design for the Stage I (3).** This course helps students develop the skills and techniques necessary for the safe design and construction of stage scenery through the study and application of static engineering, physical science and material strength using precalculus mathematics.
- TPA 5315. Physics of Stage Machinery (3).** Fundamentals of physics and Newton's Laws as they relate to stage machinery; application of these dynamics for prediction and understanding of motion of stage wagons, turntables or lifts. Emphasis is on practical use of motors, winches, turntables, lifts and other stage mechanisms.
- TPA 5335. Costume Design for Dance (3).** This course is an advanced exploration into the costume design process as it relates to different dance venues, including modern, ballet and music theatre. Rendering techniques and dance apparel are examined.
- TPA 5336. Costume Design for Film and Television (3).** Concentration in costume design for film and television. Students generate designs for a variety of projects, research work of working film and television, and understand the costume design process for film, television and related fields.
- TPA 5346. Computer Rendering for Costume Designers (3).** Prerequisite: TPA 5047. This course explores various computer rendering techniques for the costume designer and enables the student to develop an understanding of computer presentation programs and digital portfolios.

TPA 5355. Lighting Software for Theatre (3). This is an overview course in the primary light design and visualization software programs. No prior knowledge of computer-aided design is necessary. Significant individual work is required.

TPA 5356. Computer Rendering for Costume Designers (3). Prerequisite: TPA 5047. This course explores various computer rendering techniques for the costume designer and enables the student to develop an understanding of computer presentation programs and digital portfolios.

TPA 5385. Technical Production for Theatre Educators (3). Provides instruction for secondary education faculty in all areas of technical theatre production. Students should come away with the ability to train their own students in all aspects of technical theatre, as well as the ability to support productions they oversee.

TPA 5386. Advanced Technical Production for Theatre Educators (3). This course instructs secondary education faculty in advanced areas of technical theatre production. Students come away with the ability to train their own students in all aspects of technical theatre as well as the ability to support productions they oversee. In addition, persons taking this course learn to advise their students in the preparation of portfolios to be used to apply for BFA programs in theatre.

TPA 5405. Principles of Theatre Management (3). Provides students with an overview of the management concepts and practices of American theatre, especially as they apply to non-profit community and educational theatre organizations.

TPA 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 5425. Fiscal Management and Economics in the Arts (3). This course offers introductory and advanced principles of fiscal management and economics for not-for-profit arts organizations. In-depth analysis covers areas such as microeconomics; advocacy for public support of the arts; understanding of finance, accounting and bookkeeping terms and concepts; and financial statements.

TPA 5470r. MFA Practicum in Management (2-15). Prerequisite: 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 personnel 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.

TPP 5146r. Classical Performance Styles (3). This course introduces the work of the classical actor. It includes development of imaginative and technical facilities as applied to ancient Greek repertory. The course ends with an introduction to Shakespeare.

TPP 5158. Performance II for Theatre Educators (3). This course expands development of theatrical exercises, scene study and rehearsal skills. Text is drawn from contemporary American plays.

TPP 5284r. MFA Practicum in Acting (1-15). Prerequisite: 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 5355. Performance III for Theatre Educators (3). Development and strengthening of directing skills for working theatre educators. Concentrated work in direction of scenes and monologues.

TPP 5380r. MFA Practicum in Directing (2-15). Prerequisite: 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, Deyle, Stiffl, Thompson; **Associate Professors:** Audirac-Zazueta, Chapin, Doan, Miles; **Assistant Professors:** Brown, Coutts, Lowe; **Research Associate:** Higgins; **Professors Emeriti:** Cowart, 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), joint degrees in planning and law (MSP/JD), planning and international affairs (MSP/MS or MA), and 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 joint degree programs prepare professionals to work in positions at the nexus of their component professions.

All of the programs respond to the educational challenge of recognizing the breadth and diversity of the field and, at the same time, providing students with training in the common aspects, concerns, and approaches of the field. They offer the student an opportunity to study the central core of knowledge that is common to all planning activities and to develop specialized knowledge in particular problem and issue areas. Graduates of the programs are equipped to function both in generalist and specialist roles and to adapt to new challenges as the nature of the issues and preferred policy responses change. The master's degree program is accredited by the Planning Accreditation Board.

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 department maintains close ties with state, regional, and local planning agencies, the state legislature, and the governor's office. These agencies provide substantial support services to the department in the form of internships and field placements, data and research reports, visiting lecturers and adjunct faculty, and permanent employment positions.

Students come from across the nation and from many foreign countries and U.S. territories. Women and persons of color are well represented. 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 varies between 80 and 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.

Over 1000 students have graduated from the department's graduate programs. These graduates are now employed in 48 states and territories 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

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 five specializations. They are:

Growth management and comprehensive planning

Planning for developing areas

Environmental planning and natural resource management

Housing and community development

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 course work in microcomputer applications for planning, including geographic information systems (GIS). Both the geography and urban and regional planning departments offer GIS course work. GIS is supported in a 40 station College of Social Sciences lab. General microcomputer applications (including spreadsheets, statistical software, and word processing) as well as GIS are supported in an eight station department lab, a department GIS research 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 5342, 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 5125 (core), URP 5211 (core), URP 5847 (core), URP 5930 (zero [0] hours)

Spring, First Year: URP 5201 (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

Joint Law-Planning Degree Program

The Department of Urban and Regional Planning and the College of Law offer a joint degree program that allows students to qualify for both the master's of science in planning 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 joint 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 joint 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 joint degree program pursue both degrees concurrently, spending their first year in full-time course work in either unit, and the second year in the other. Thereafter, a mixture of course work 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.

Joint degree students need not select a planning specialization (in effect, law becomes their specialization), but they must continue to meet all other requirements for the planning degree, including the internship and the capstone project. The Department of Urban and Regional Planning will award the MSP degree only if the student's cumulative grade point average in MSP degree courses is 3.0 or higher. This requirement is in addition to, and does not replace, any other University or departmental academic standing requirements. A member of the law faculty replaces one member of the urban and regional planning faculty on the advisory committee for the capstone project.

Joint Planning and Public Administration Degree Program

The professions of planning and public administration are intertwined in numerous ways. Many positions in government can best be filled by persons who possess the knowledge and skills of both administrators and planners. Planners in local governments often aspire to become administrators of governments and planning organizations. Conversely, administrators, especially in rapidly growing governments, may be hampered if they cannot exercise the skills necessary to frame plans.

Very few persons achieve professional competence in both fields; those who do gain substantial career flexibility and attractiveness to prospective employers. The joint degree program at Florida State University is one of only a handful in the nation. It permits the mastery of core knowledge and skills in both areas in three years or less, instead of the four years or more that would otherwise be required. It does so by eliminating duplicative course work in analytical methods and general electives.

Applicants to the MSP/MPA joint degree program should make formal application through the admissions office of either the Department of Urban and Regional Planning or the School of Public Administration and Policy using the joint degree program's unique major code (327777). A full photocopy of all application materials should be sent to the second unit's admissions office simultaneously. To be admitted to the joint degree program, each of the two units must separately admit the applicant to its respective degree program. Those currently enrolled in either degree program, and who have not completed twenty-four (24) semester hours of study, may apply to the second department. Admission to that department shall constitute admission to the joint degree program.

Total degree hours required for the joint degree is sixty-six (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 5035. The student selects and completes both an urban and regional planning specialization **and** a public administration concentration. A single internship meeting the requirements of both degrees is required. A single capstone/action paper meeting the requirements of both degree programs is completed under **either** URP 5910 **or** PAD 6908 and with the direction of a committee consisting of faculty from each of the units. Students complete the internship and professional paper requirements in the opposite department from which the research sequence is completed.

Each of the two units will award a degree only if the cumulative grade point average for courses with that unit's prefix is 3.0 or higher. This 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 course work between the two departments. Departmental advisers will provide guidance on the proper sequence of courses for each program. Students who attend one semester of summer school and who complete the internship requirement the second summer should be able to complete all degree requirements in two and one-half calendar years.

Joint Planning and International Affairs Degree Program

Because of the department's strong interest in preparing students for careers in international development, the faculty created the Joint Planning and International Affairs Degree Program. It is one of very few programs in the nation to combine master's degrees in these two fields. Students completing this program of study will earn the MSP degree in urban and regional planning and the MA or MS in international affairs. The joint degree program can also be combined with the Peace Corps Master's Internationalist program.

Applicants to the MSP/MS or MA in International Affairs should make formal application through the admissions office of either the Department of Urban and Regional Planning or the International Affairs Program using the joint degree program's major code (327779). A full photocopy of all application materials should be sent to the second unit's admissions office simultaneously. To be admitted to the joint degree program, each of the two units must separately admit the applicant to

its respective degree program. Those currently enrolled in either degree program and who have not completed twenty-four (24) semester hours of study may apply to the second unit. Admission to that unit shall constitute admission to the joint degree program.

Total degree hours required for the joint degree program is sixty-seven (67) or sixty-eight (68) depending on whether the student selects the thesis or non-thesis (international studio) option. Each of the two units will award a degree only if the cumulative grade point average for courses taken to meet the degree requirements of each unit is 3.0 or higher. The student completes the core course requirements of each degree, and then selects an urban and regional planning specialization. All students complete an internship of 10 weeks full-time (or part-time equivalent) in a planning or international affairs related agency or organization. The internship should have planning or public policy-related content. A single capstone course meeting the requirements of both degree programs is completed under either master's theses courses URP 5871 or INR 5971 or capstone studio course URP 5342. Students in the joint degree program do not have the option of completing comprehensive exams to satisfy the capstone requirement. Students taking the studio option must take a studio with an international planning emphasis and also take three hours of directed individual study (INR 5906) related to the studio.

The student will take courses in at least two other departments participating in the International Affairs program.

The student must also fulfill the requirement for a focus on developing countries. If the student takes the Planning for Developing Areas specialty, this will fulfill the developing areas focus, but if the student opts for a different specialization in Urban and Regional Planning, s/he will need to take three other International Affairs courses to fulfill this requirement. All students must satisfy the foreign language requirement for a Master of Arts degree even if they choose a Master of Science degree. Proficiency may be demonstrated by satisfactory performance on the Graduate School Foreign Language Tests of the ETS, by certification by the language department, by taking twelve hours of language with an average grade of B, or four years of language in high school. Up to six hours of graduate level courses in a foreign language may be used to fulfill the degree requirements as International Affairs electives.

Peace Corps Master's Internationalist Program

The rate of urbanization is much more rapid in developing than developed areas. The Master's International Program at FSU is designed to ensure a steady stream of volunteers for the planning of these rapidly growing urban areas. Courses cover the legal and institutional context in which planners operate, as well as specific strategies such as regional economic development, microenterprise development, housing and infrastructure, and capacity building particularly among non-governmental organizations.

Students develop skills in the preparation of development plans, in the design, management and implementation of development projects, and in participatory planning and research. Students are also encouraged to take courses in one or more of the other specializations in the department, namely housing and community development, transportation, comprehensive planning and land use, environmental planning, and health planning.

MIP students will take the full sequence of core courses required for the MSP degree with a specialization in Planning for Developing Areas. However in recognition of the extensive training received during Peace Corps training in local language and cultural aspects of the host country, MIP students will be permitted to complete 42 credit hours instead of the standard 48 credit hours. During their first year of courses MIP students must take URP 5610 Introduction to Planning for Developing Areas and URP 5616 Project Planning in Developing Areas to prepare them for Peace Corps service.

After finishing their first year of course work, MIP students are placed as Peace Corps Volunteers in a developing countries position to work with local planners and administrators on problems of urban development, or to help non-governmental organizations fill the gap between government services and local needs. Upon completion of their two year Peace Corps service MIP students will return to Tallahassee to complete their degree requirements with at minimum of one more semester of

courses. At this time, if students wish to change their specialization, they are free to do so, though this may require a slightly longer stay in Tallahassee.

Students in the MIP may choose to do a master's paper for their capstone requirement based in part on their experiences in Peace Corps. Students who wish to pursue this option should discuss this carefully with their adviser prior to departing for their Peace Corps service. However, if students prefer they may complete a studio project under the supervision of departmental faculty to complete their capstone requirement once they return to Tallahassee.

The benefits of this program include:

- Peace Corps training provides a six credit reduction in total required for graduation
- Peace Corps service fulfills the departmental internship requirement
- Peace Corps offers the international experience needed to obtain employment in a developing country.
- Peace Corps service provides US Government non-competitive eligibility for returning volunteers

Certificate in Urban Design

The department offers a graduate certificate in urban design that prepares professionals that are conversant in both design and planning languages and are able to devise, implement and communicate physical plans and policy to a diverse group of stakeholders. The certificate provides students with instruction in the history and theory of urban design, visualization techniques, and physical planning skills and application.

The certificate program is open to both FSU graduate matriculates and to non-matriculates studying under special graduate student status. Applicants may be, but are not required to be, currently pursuing the master's or PhD degrees in urban and regional planning. Those pursuing the MSP or PhD degrees, or other graduate degrees at FSU, must be in good academic standing to be admitted. There are no requirements for current FSU graduate degree students other than good academic standing. Non-matriculated applicants must satisfy the following requirements:

- Applicants must hold 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.
- The minimum criterion to be considered for admission is a grade point average (GPA) of 3.0 or higher for previous study or a combined verbal and quantitative score for the Graduate Record Exam (GRE) of 1000.
- Applicants whose native language is not English and who have not received a degree from a college or university in an English-speaking nation also must submit an official transcript of the Test of English as a Foreign Language (TOEFL). A minimum TOEFL score of 213 (computer-based) or 550 (paper-based) is required for an applicant to be considered for admission.

To complete the certificate, students are required to complete 18 hours of class work in required courses in urban design, site design and land use analysis, pedestrian oriented communities, visualization methods for urban design, as well as electives in land use planning, transportation and land use, or neighborhood planning. Students must also satisfy a capstone requirement by taking URP 5342 as a design studio or completing a directed independent research project in URP 5910 on a urban design topic. More specific information on course work and specific requirements may be obtained by contacting the department.

Certificate in Real Estate Development

The Department of Urban and Regional Planning, in cooperation with the College of Business, offers a graduate certificate in real estate development. Urban planners must have extensive knowledge of real estate development in order to adequately and efficiently regulate and work with real estate developers. In turn, developers must be able to operate in an environment in which land use and environmental planning and regulation are critical to the success of their projects. Together, planners and developers must have a joint understanding of the real estate development process and the role that planning plays in shaping and regulating that process.

The certificate is available to any graduate student admitted and enrolled in either the master's program or PhD program in urban and regional planning or the MBA program in the College of Business. Students must be in good academic standing.

To complete the certificate, students are required to complete eighteen (18) semester hours of class work in the following areas: comprehensive planning and growth management, real estate tools, land use and real estate law, design and development, market analysis, and investment and development. A project seminar in real estate investment serves as the capstone course for the certificate. Information on course work and specific requirements may be obtained by contacting the department.

Exchange Program with the University of Amsterdam

Students may also participate in the Department's student exchange program with the University van Amsterdam Faculty of Social and Behavioral Sciences' Master's in Metropolitan Studies. This master's program features many courses taught in English by faculty experts in European urbanization and international development 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. Florida State doctoral students are oriented toward critical evaluation of existing knowledge and the development of new knowledge for public policy purposes. The degree program has five key components: the qualifying examination; the program statement; course work in theory, methods, and application; the preliminary examination; and the dissertation.

The doctoral program is a highly individualized program of study, developed under the direction of a faculty supervisory committee, and ordinarily requiring three years of study post-master's degree.

Qualifying Examination

Before beginning actual doctoral study, the student must demonstrate competency in the core areas of the master's program by either taking core courses or demonstrating competency in them. How the student demonstrates competency in a core course is decided in consultation between the student and the faculty member teaching each core course. However done, demonstrating competency in the core courses constitutes passing the qualifying exam, which qualifies the student for doctoral studies.

Program Statement

The content of each student's program of study is tailored to the objectives and needs of the student and is specified in a program statement that the student prepares in consultation with a major professor and a doctoral committee assembled during the first semester of study.

The program statement specifies the academic objectives of the student and the areas of theory, methods, and applications necessary to achieve those objectives. Because each student's needs are unique, it is unlikely that new doctoral students will follow exactly in the path of earlier doctoral students or each other.

Course Work

Doctoral course work includes a minimum of 42 semester hours of study, including at least 21 hours of theory courses, 9 hours of intermediate or advanced methods courses, and 12 hours of application courses. These courses include four courses required of all doctoral students:

- ECP 5606: Urban and Regional Economics
- URP 6102: Seminar in Planning Theory
- URP 6202: Design of Policy Oriented Research
- URP 6846: Seminar in Urban Theory

With appropriate departmental approval, students in the master's program in urban and regional planning may apply up to eighteen (18) semester hours of course work (exclusive of the core curriculum) to the doctoral program.

Preliminary Examination

Upon completion of courses, the student takes his or her Preliminary Examination which is a set of written and oral exams in the areas of planning theory, urban and regional theory, research methods, and applications set forth in the student's program statement. The Preliminary Examination normally spans a two-week period.

Dissertation

Upon passage of the Preliminary Examination, the student is advanced to candidacy and prepares a dissertation. The dissertation's scope is laid out in a prospectus approved by the student's supervisory committee. The prospectus may include a statement of the problem that the student is addressing, a discussion of the literature pertaining to that problem, a set of hypotheses that the student intends to test, and a research design for testing the hypotheses. Once the prospectus is approved, the student carries out the research design and completes the dissertation, defending it publicly prior to graduation.

Pre-Doctoral Program

In order to encourage high quality master's students to go on for the PhD, the department has created a pre-doctoral program that master's students may apply to in their first year of study. If accepted into the pre-doctoral program, students may take up to eighteen (18) hours of doctoral-level courses in their second year, which will be counted toward the doctoral degree if they are admitted to the PhD program upon completion of the master's degree. Students electing to pursue this option will therefore be able to complete formal course work for the PhD with as little as one additional year of courses beyond the master's degree.

Admissions and Financial Aid

Application for admission is usually made for the Fall term. Because of the sequencing of courses, admission for Fall is preferable, but applications are considered for Spring term admission as well. No students are admitted for first enrollment in the Summer term. The deadline for receipt of all materials for admissions applications is July 1st for Fall admission and November 1st for Spring admission. Earlier deadlines apply for financial aid candidates and for applications from non-U.S. students, however. Financial aid applicants applying for Fall admission must submit all materials by February 15th (January 15th for University and Presidential Fellowships). The deadlines for non-U.S. students are described below. Persons applying after the appropriate deadline will be considered on a space-available basis only.

Applications for admission to the MSP program are welcomed from persons holding a bachelor's degree from an accredited institution of higher learning in the United States, or the equivalent from an institution abroad. No specific major is required, but persons contemplating planning graduate studies are encouraged to earn their undergraduate degree in the humanities (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.

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 course work 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 course work 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 may be obtained by writing to *Admissions Assistant, Department of Urban and Regional Planning, Florida State University, Tallahassee, Florida 32306-2280 U.S.A.* Information and application materials may also be obtained from the department's Web site: <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 November 15th for Fall term admission, and by September 1st for Spring term admission. These applications must include a confidential financial statement necessary for visa purposes that is normally supplied with the international admissions application forms. Applicants whose native language is not English (and who have not received a degree from a college or university in an English-speaking nation) must submit 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 *International Center. ATTN: Immigration, Florida State University, Tallahassee, Florida 32306-4240 U.S.A.*

In addition to the required written application, applicants are encouraged to come to Tallahassee for a personal interview. This permits a clearer exchange of information, provides us with a firmer sense of the applicant's goals, and allows the applicant to evaluate resources here first hand. The admissions assistant will arrange an interview on request.

Definition of Prefix

URP—Urban and Regional Planning

Graduate Courses

Planning Theory and Practice

URP 5101. Planning Theory and Practice (3). A general introduction to the field of planning, examining the intellectual heritage and procedural approaches shared by practitioners working in all areas of contemporary planning practice. Also introduces students to the general area of planning theory and some of the fundamental political and ethical issues they will face in planning practice.

URP 5122. Planning Dispute Resolution (3). Complex regulatory disputes frequently slow public sector decision making and cripple major private sector investments. Parties to disputes such as location of locally unwanted land uses, setting of air and water quality standards, and evaluation of urban and transportation plans frequently fail to cooperate to achieve the best possible outcome. Examines why this is so and tries to develop the skills necessary for individuals to improve the outcome in contentious decision making.

URP 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 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 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 course concentrates on the urban theory component of urban and regional theory, referring to the patterns and processes of development within cities. An emphasis is placed on the theories of human ecology, economics, and geography, and the translation of these theories into a planning perspective.

Planning for Developing Areas

URP 5610. Introduction to Development Planning (3). 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.

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 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). Prerequisites: URP 5272, 5312. Corequisite: URP 5312. Preparation of the urban land-use plan including data collection; evaluation of location, market, and environmental factors; and balancing of stakeholder interests.

URP 5319r. Special Topics in Comprehensive Planning and Growth Management (3). An advanced seminar on special topics in comprehensive planning and growth management. Specific content varies. May be repeated to a maximum of six (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). Prerequisite: URP 5272. Focuses on the study and evaluation of the built environment, with particular reference to those aspects of the development process that result in "better" physical forms. Students should gain an appreciation for the architectural and design elements of land use development, be in a position to evaluate alternative site designs for impacts on use and functioning, and relate the design and uses of land to planning and growth control mechanisms in a critical way.

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.

Housing and Community Development

URP 5540. State and Local Economic Development (3). Analyzes strategies and tools for developing employment and investment in state and local economies. Considers programs targeted to depressed urban neighborhoods, rural communities, downtown commercial areas and specific business sectors.

URP 5615. Infrastructure and Housing in Less Developed Countries (3). An examination of infrastructure and housing issues in developing countries, including relationship between infrastructure and development, demand and supply of new facilities, financing alternatives, squatter housing, and self-help strategies.

URP 5742. Problems and Issues in Housing and Community Development (3). Introduction to housing and community development issues, problems, and policy. Attention is focused on the operation of the housing market, historical development of housing and community development problems, and the evaluation of public and private sector responses to these problems.

URP 5743. Neighborhood Planning (3). Focuses on ways in which planning can enable neighborhood residents to enhance the attractiveness of their neighborhood. Course is for planners who will be working with neighborhood groups or who will be employed by neighborhood organizations or community development corporations.

URP 5749r. Special Topics in Housing and Community Development (3). Advanced seminar in selected housing and community development issues and problems. Content varies. May be repeated to a maximum of six (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). (P/F grade only.)

URP 8976r. Master's Thesis Defense (0). (P/F grade only.)

URP 8985r. Dissertation Defense (0). (P/F grade only.)

VISUAL DISABILITIES:
see Childhood Education, Reading, and Disability Services

Program in WOMEN'S STUDIES

COLLEGE OF ARTS AND SCIENCES

Director: Joyce Carbonell (Psychology/Women's Studies);
Participating Faculty: Pohl (Anthropology), Hartwell (Art); Finnegan (Art Education); Bearor (Art History); Gilmer (Chemistry), N. DeGrummond, Fulkerson, Sickinger, Tatum (Classical Languages, Literature, and Civilization); Jordan, Laurents, Nudd (Communication); Young (Dance); MacDonald, Monkman, Schwartz (Educational Leadership and Policy Studies); Barbour-Brennan, Cooper, Edwards, Gardner, Goodman, Laughlin, McGregory, Montgomery, Ortiz-Taylor, Picart, Rowe, Saladin, Walker (English); Green, Hadden, Herrera, Sinke (History); Boutin, Cappuccio, Cloonan, Graham-Jones, Gray, Poey, Sharpe, Stanley, Walters (Modern Languages and Linguistics); Davis (Nursing); Marcus (Oceanography); Morales (Philosophy); Kemp (Political Science); Carbonell (Psychology); Erndl, Kalbian, Kavka (Religion); Maxwell, Vinton, Wilke (Social Work); Brewster, Isaac, Martin, Padavic, Reid, Tillman (Sociology); Lynn (Sport Management); Gonzalez, 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 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 Strozzer Library and in the extensive collections of the College of Law Library and the Mildred and Claude Pepper Library. The Jean Gould Bryant Library of Women's Studies is housed in the Office of Women's Studies, 214J WJB, and provides books, journals and newsletters relevant to women's studies. A searchable database of these resources also is available. The nearby State Archives are an additional source of research material.

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.

Approved Courses

Note: See the appropriate individual departments for full course descriptions.

AMH 5564	Women in Modern America (4)
AMH 5567	Women in 19th-century America (4)
AMH 5568	Colonial and Revolutionary Era America Woman's History (4)
ARH 5875	20th-Century Feminist Art Criticism (3)
CCJ 5672	Gender, Crime, and Justice (3)
EDA 5227	The Role of the Woman Administrator in Education (3)
EDF 5706	Gender and Education in Comparative Perspective (3)
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)
SYP 6356	Sociology of the Contemporary Women's Movement (3)
THE 5437	Gender, Race and Performance (3)
URP 5544	Gender and Development (3)

Definition of Prefix

WST—Women's Studies

Graduate Courses

WST 5905r. Directed Independent Study (1-3). (S/U 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

UNIVERSITY ADMINISTRATION

FLORIDA BOARD OF GOVERNORS

Carolyn K. Roberts, Chair	Ocala
Sheila M. McDevitt, Vice Chair	Tampa
Jorge Arrizurieta	Coral Gables
Arlen Chase	Orlando
John Dasburg	Miami
Ann W. Duncan	Tampa
Charles Edwards	Ft. Myers
Frank Harrison	Tampa
J. Stanley Marshall	Tallahassee
Frank Martin	Tallahassee
Sheila M. McDevitt	Tampa
Lynn Pappas	Jacksonville
Ava L. Parker	Jacksonville
Tico Perez	Orlando
Gus Stavros	St. Petersburg
John W. Temple	Boca Raton
Zachariah P. Zachariah	Ft. Lauderdale
Commissioner of Education	Tallahassee

STATE BOARD OF EDUCATION

T. Willard Fair, Chair	Miami
Donna Calloway	Tallahassee
Akshay Desai	St. Petersburg
Roberto Martinez	Coral Gables
Phoebe Raulerson	Tallahassee
Kathleen Shanahan	Tampa
Linda Taylor	Fort Myers
Commissioner of the Department of Education	Tallahassee

BOARD OF TRUSTEES

Jim Smith, Chairman	Tallahassee
Harold Knowles, Vice Chairman	Tallahassee
Derrick Brooks	Tampa
Jim Cobbe	Tallahassee
June Duda	Oviedo
David Ford	Rosemont
Manny Garcia	Winter Park
Andrew Haggard	Coral Gables
Richard McFarlain	Tallahassee
E. Ann McGee	Sanford
Leslie Pantin	Miami
Susie Busch-Transou	Tallahassee
Joseph O'Shea, SGA President	Tallahassee

UNIVERSITY PRESIDENT

Thomas K. Wetherell

Executive Assistant	Cheryl Bakker
Inspector General	David P. Coury
Director of Intercollegiate Athletics	David Hart, Jr.
General Counsel	Betty J. Steffens
Assistant in Administration	Laura Brock

PROVOST AND EXECUTIVE VICE PRESIDENT FOR ACADEMIC AFFAIRS

Lawrence G. Abele

Dean of the Faculties and Deputy Provost	Anne Rowe
Associate Dean of the Faculties	Jennifer N. Buchanan
Director of Diversity Enhancement and Compliance	Renisha Gibbs
Associate Vice President for Academic Support	Patricia Hayward
Associate Vice President for Academic Affairs Executive Assistant	E. Joe Nosari
Assistant Vice President for Academic Affairs	Linda Thompson
Dean, Graduate Studies	Anne Blankenship
Dean, Undergraduate Studies	Nancy Marcus
Associate Dean, Undergraduate Studies	Karen L. Laughlin
Associate Dean, Undergraduate Studies and Director of Community College and Interinstitutional Relations	Gregory Beaumont
Director of Academic Support/Acceptance Program	Bruce Janasiewicz
Assistant Vice President for Enrollment Management	Linda Mahler
Director of Admissions	John Barnhill
Director of Financial Aid	Janice Finney
Director of University Honors Program	Darryl Marshall
Director of Minority Academic Programs	Helen Burke
University Registrar	Angela Richardson
Interim Registrar	Timothy Martin
Director of Retention Studies	Kim Barber
Program Director, Office of Technology Integration	Alice Earp
Director of University Computing Services	H. Carlyle Baker
Director of Learning Systems Institute	James M. Baker
Director of Multidisciplinary Evaluation and Consulting Center	Laura Lang
	Beverly Atkeson

VICE PRESIDENT FOR PLANNING AND PROGRAMS

Robert Bradley

Assistant to the Vice President	Ruth Feiock
Executive Secretary	Elaine Costa
Director, University Outreach and Director of Academic and Professional Program Services	William Lindner
Director of International Programs	James E. Pitts
Director of University Libraries	Julia Zimmerman
Dean, Panama City Campus	George DePuy

VICE PRESIDENT FOR RESEARCH***Kirby W. Kemper***

Senior Executive Secretary	Linda McCorvey
Executive Secretary	Lezlee Brand
Associate Vice President	W. Ross Ellington
Assistant Vice President	Olivia H. Pope
Executive Director, IP Development and Commercialization	John A. Fraser
Director of Sponsored Research Services	Gregory W. Thompson
Director of Laboratory Animal Resources	Robert M. Werner
Director of FSU Coastal and Marine Laboratory	Felicia C. Coleman
Director of National High Magnetic Field Laboratory	Gregory S. Boebinger
Director of Business and Finance, FSU Research Foundation	Sharon Woodall
Director of Sponsored Research Accounting Services	Peter Derham
Director of Corporate Relations	Kim Field
Director, Center for Advanced Power Systems	Steinar J. Dale
Director of Federal Relations and Economic Development	Raymond Bye
Legal Counsel	Betty Southard

SR. VICE PRESIDENT FOR FINANCE AND ADMINISTRATION***John R. Carnaghi***

Associate Vice President for Budget, Planning and Financial Services	Ralph Alvarez
Associate Vice President for Administration	Paul Strouts
Associate Vice President for Facilities	Dennis Bailey
Associate Vice President for Student Affairs, Finance, and Operations	Liz Maryanski
Associate Vice President for Technology Integration	Larry Conrad
Assistant Vice President /Enterprise Resource Planning	Michael Barrett
Assistant Vice President for Administrative Services	Perry Crowell
Assistant Vice President for Human Resources	Joyce Ingram
Assistant Vice President for Information Services	Jeff Bauer
Executive Associate Athletic Director/Athletics	Charles Hurst
Director of University Budgets	Michael Lake
Director of Business Services	David Leeka
University Controller	Tom Harrison
Director, Employee Assistance Program	Bruce Prevatt
Director, Environmental Health and Safety	Tom Jacobson
Director, FSU Foundation /Accounting	Lauren Hensley
Director, FSU Research Foundation	Sharon Woodall
Director, Institutional Research	Jill Kosiewski
Police Chief	David Perry
Director of Purchasing and Receiving	Marcie Doolittle
Director of Sponsored Research and Accounting Services	Peter Derham
Director, Telecommunications	Harvey Buchanan
Director, University Business Administrator Program	Angela Gaskins

VICE PRESIDENT FOR UNIVERSITY RELATIONS***Lee F. Hinkle***

Executive Secretary	Lynna Sands
President, FSU Alumni Association, Inc.	Barry Adams
President, Seminole Boosters, Inc.	Andy Miller
President, FSU Foundation	Charles Raspberry
Assistant Vice President for University Relations and Director, University Communications	Franklin D. Murphy
Assistant Vice President for Community Relations and Events	Donna McHugh
Administrative Director	Dawn C. Randle
Assistant Vice President for Governmental Relations	Kathleen Daly
Director of Broadcasting Center	Patrick Keating
Director of Visual Media and Promotions	Dennis Schnittker
Director of Media Relations	Browning Brooks
Assistant Director, Print and Electronic Publishing	Steve Rine
Assistant Administrative Director	Aimee Wirth
Assistant Director of Events	Kirsten Soriano
Director, Seven Days of Opening Nights	TBA

VICE PRESIDENT FOR STUDENT AFFAIRS***Mary B. Coburn***

Associate Vice President for Student Affairs	Eric Weldy
Associate Vice President for Student Affairs	Elizabeth Maryanski
Director of Multicultural Affairs	Juan Guardia
Director of Career Center	Jeff Garis
Director of University Housing	Rita Moser
Director of Thagard Student Health Center	Lesley Sacher
Dean of Students	Jeanine Ward-Roof
Interim Director of Student Counseling Center	Nikki Pritchett
Student Body President	Joe O'Shea
Student Body Vice President	Chad Reeves
Director of Oglesby Union	Bill Clutter
Director of Campus Recreation	Alicia Crew
Director of Center for Academic Retention and Enhancement	Angela Richardson
Director of Educational Research Center for Childhood Development	Liz Gilliland
Director of International Center	Cindy Green
Director of Leadership Center	Laura Osteen
Director of the Center for Civic Education and Service	William Moeller

DEANS OF COLLEGES

Dean, College of Arts and Sciences	Joseph A. Travis
Dean, College of Business	Caryn Beck-Dudley
Dean, College of Communication	John K. Mayo
Dean, College of Criminology and Criminal Justice	Thomas Blomberg
Dean, College of Education	Marcy P. Driscoll
Dean, FAMU-FSU College of Engineering	Ching-Jen Chen
Dean, College of Human Sciences	Billie Collier
Dean, College of Information	Larry Dennis
Dean, College of Law	Donald Weidner
Dean, College of Medicine	James Ocie Harris
Dean, College of Motion Picture, Television, and Recording Arts	Frank Patterson
Dean, College of Music	Don Gibson
Dean, College of Nursing	Lisa Plowfield
Dean, College of Social Sciences	David W. Rasmussen
Dean, College of Social Work	C. Aaron McNeece
Dean, College of Visual Arts, Theatre, and Dance	Sally McRorie

GRADUATE FACULTY

Changes in faculty, professional, and administrative staff made after September 30, 2006, may not be reflected in the following list. Please note that departmental faculty listings may reflect changes made after the September 30th deadline; thus, differences may exist between departmental faculty lists and this list.

Graduate Faculty

Those whose names are preceded by an asterisk or a plus are members of the graduate faculty. Membership on the graduate faculty falls into one of two categories on the basis of functional responsibility:

- * May teach graduate-level courses and may serve as major professor for master's degree students
- + May serve as major professor for doctoral students as well

- Abbot, Fredrick M.**, J.D., 1977, Yale; LL.M. 1989, Cal. Berkeley. Professor of Law and Edward Ball Eminent Scholar in International Law. Fields: International Trade, Intellectual Property, International Intellectual Property, Public International Law, International Business Transactions, Global Regulation of the Pharmaceutical Sector.
- + **Abdel Raziq, Yassir**, Ph.D., 1999, Purdue; Assistant Professor of Civil and Environmental Engineering. Fields: Construction Engineering and Management, Computer Applications in Civil Engineering, GPS/GIS Application, Intelligent Engineering Systems, Simulation Modeling of Engineering Systems.
- + **Abdullah, Makola**, Ph.D., 1994, Northwestern University; Assistant Professor of Civil and Environmental Engineering. Fields: Structural Dynamics, Active Control, Earthquake Wind Engineering.
- + **Abele, Lawrence G.**, Ph.D., 1972, Miami; University Provost, and Professor of Biological Science. Fields: Ecology, Community Biology, Systematics of Decapod Crustaceans.
- + **Abell, Joseph N.**, Ph.D., 1986, Florida State; Associate Professor of Social Work. Fields: Child Welfare, Social Work Research, Family Social Work, Health.
- + **Abichou, Tarek**, Ph.D., 1999, Wisconsin; Assistant Professor, Civil Engineering. 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.**, Ph.D., 1981, Tennessee at Knoxville; Associate Professor of Nutrition, Food, and Exercise Science. Fields: Health Behavior, Stress, Wellness, Drug Education.
- * **Adamovich, Ljubisa S.**, Ph.D., 1961, University of Belgrade; Scholar/Scientist/Engineer, Dean's Office, College of Social Sciences. Fields: Comparative economic systems, economics of transition, international economics.
- * **Adams, Jonathan L.**, Ed.D., 1995, Boston; Associate Professor of Communication. Fields: Online and distance media systems; new media and scholarly achievement; interface design and development; interactive design.
- + **Adams, Todd**, Ph.D., 1997, Notre Dame; Assistant Professor of Physics. Fields: Experimental Physics, Elementary Particle Physics.
- * **Adolph, Winnifred R.**, Ph.D., 1978, North Carolina at Chapel Hill; Associate Chair and Associate Professor of Modern Languages and Linguistics. Fields: German Literature of the Nineteenth Century, Drama and Pedagogy.
- + **Agashe, Amod**, Ph.D., 2000, Univ. of California Berkeley; Assistant Professor, Mathematics.
- + **Aggarwal, Sudhir**, Ph.D., 1975, Michigan; Professor and Chair of Computer Science. Fields: Computer Networks, Distributed Systems, Real-time Systems, Search Engines and Databases, Design Analysis of Protocols.

- + **Ahlquist, Jon E.**, Ph.D., 1981, Wisconsin; Associate Professor of Meteorology. Fields: Planetary-Scale Dynamics, Nonlinear Systems.
- * **Ahn, Toh-Kyeong**, Ph.D., 2001, Indiana; Visiting Assistant Professor of Political Science, College of Social Sciences. Fields: Public Policy.
- * **Akbar, Naim**, Ph.D., 1970, Michigan; Associate in Clinical Psychology, Psychology. Fields: Cultural Determinants of Personality, Mental Health Issues of African-Americans, Philosophy of Science.
- + **Alabugin, Igor V.**, Ph.D., 1995, Moscow St. University; Assistant Professor of Chemistry and Biochemistry. 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.**, Ph.D., 1981, Madrid; Associate Scholar/Scientist, Institute of Molecular Biophysics. Fields: Polymer crystallization and characterization; structure-property relations; morphology of semi-crystalline polymers.
- + **Aices, Kelli A.**, J.D., 2005, Illinois Champaign; Assistant Professor of Law. Fields: Corporate Governance, Bankruptcy.
- + **Aldrovandi, Ettore**, Ph.D., 1992, International School for Advanced Studies - Italy; Assistant Professor of Mathematics. Fields: Algebraic Geometry, Complex Analysis.
- + **Allen, Michael L.**, Ph.D., 1989, North Texas; Professor of Music. Fields: String Education.
- + **Al-Otaiba, Stephanie**, Ph.D., 2000, Vanderbilt University; Assistant Professor of Special Education. Fields: Reading Intervention, Adapting the General Education Curriculum.
- + **Altmann, Curtis R.**, Ph.D., 1995, California at Berkeley; Courtesy Assistant Professor of Biological Science, College of Arts and Sciences. Field: Molecular Embryology.
- + **Aluffi, Paolo**, Ph.D., 1987, Brown; Professor of Mathematics. Fields: Algebraic geometry, intersection theory, singularities, and enumerative geometry.
- + **Alvi, Farrukh S.**, Ph.D., 1992, Penn State; Associate Professor of Mechanical Engineering. Fields: Experimental fluid dynamics; flow control; micro-fluid dynamics and diagnostics; optical diagnostics, gas dynamics.
- * **Amsler, Eva**, B.M., 1980, University Fribourg i Breisgau, Assistant Professor of Music. Fields: Woodwind Performance/Literature.
- * **Anderson, Leon, Jr.**, M.M., 1996, Southeastern La. Univ. Associate Professor of Music. Fields: Music Performance, Jazz Studies.
- + **Anderson, Rodney D.**, Ph.D., 1968, American University; Professor of History. Fields: Latin America, Mexico.
- + **Anderson, Thomas L.**, Ph.D., 1983, Georgia; Professor of Art Education. Fields: Art Criticism and Theory, Art History, Art Education.
- + **Andrei, Petru**, Ph.D., 2004, Maryland; Assistant Professor of Electrical and Computer Engineering. Fields: Computational electromagnetics, modeling and simulation, semi-conductor devices, and magnetics.
- * **Andrews, Pamela L.**, M.M., Associate Professor of Music. Fields: Double Bass Performance, Music Education.
- + **Ang, James S.**, Ph.D., 1972, Purdue University; Professor of Finance and Bank of America Eminent Scholar in Banking. Field: Corporate Finance.
- + **Apel, Kenn**, Ph.D., 1986, Michigan, Professor, Communication Disorders. Fields: New Technologies, Language and Literacy Development and Disorders.
- + **Arias, Santa**, Ph.D., 1990, Wisconsin at Madison; Associate Professor of Modern Languages and Linguistics. Fields: Spanish American Colonial Literature, Nineteenth - century Spanish American Literature, Sixteenth - and Seventeenth - century Spanish Literature, Historical Linguistics.

- + **Arjmandi, Bahram**, Ph.D., 1991, Kansas State, Professor Human Sciences. Fields: Bone and calcium metabolism, osteoporosis and osteoarthritis, sterol biosynthesis, functional food and health.
- + **Arnold, Anthony J.**, Ph.D., 1982, Harvard; Associate Professor and Associate Chair of Geological Sciences. Fields: Paleontology, Evolutionary Theory.
- + **Arora, Krishna**, Ph.D., 1976, Indian Institute of Technology (Delhi); Associate Professor of Electrical and Computer Engineering. Fields: Optical Fiber Systems, Signal Processing, Communication Theory and Systems.
- + **Arora, Rajendra K.**, Ph.D., 1965, St. Andrews; Professor of Electrical and Computer Engineering. Fields: Optoelectronics, Quasi-Optics, VLSI Interconnects, Microwave and Millimeter Wave Techniques, Microwave Integrated Circuits, Superconductivity.
- + **Arpan, Laura M.**, Ph.D., 1999, Alabama; Visiting Assistant Professor of Communication. Fields: Persuasion and Attitude Structure, International Public Relations, Crisis Communication, Organizational Image.
- + **Aspinwall, Leslie N.**, Ph.D., 1994, Florida State; Associate Professor of Middle and Secondary Education. Fields: Students' Conceptual Understanding of Elementary Calculus, Middle School Students' Probabilistic Understanding.
- * **Atkeson, Beverly M.**, Ph.D., 1976, Georgia; Director, Research Programs/Services, Social Work. Fields: Evaluation and Testing of School-Age Children Experiencing Academic and Behavior Problems.
- + **Atkinson, Robert E., Jr.**, J.D., 1982, Yale; Ruden, McClosky, Smith, Schuster & Russell Professor of Law. Fields: Property, Professional Responsibility, Legal Ethics, Law and Literature, Taxation of Nonprofit Organizations.
- + **Atolia, Manoj**, Ph.D., 2004, Indiana University, Assistant Professor of Economics.
- + **Audirac-Zazueta, Ivonne**, Ph.D., 1988, Florida; Associate Professor of Urban and Regional Planning. Fields: Sustainable Development, Growth Management, Neo-Traditional Design.
- * **Austin, Anjali**, Associate Professor of Dance. Fields: Ballet Technique.
- * **Autore, Don M.**, Ph.D., 2006, Virginia Tech, Assistant Professor Business Administration. Fields: Corporate security issuance, securities regulation, capital structure, corporate governance.
- + **Baer, Howard A.**, Ph.D., 1984, Wisconsin; J. Daniel Kimel Professor of Physics, 2002. Fields: Theoretical High Energy Physics.
- * **Baggott, Julianna C.**, M.F.A., 1994 University of North Carolina Assistant Professor of English. Fields: Fiction (Novel Writing), Poetry and Children's Books.
- + **Bailey, Jon Scott**, Ph.D., 1970, Kansas; Professor of Psychology. Fields: Applied Behavior Analysis, Classroom Management, Research Methods in Applied Behavior Analysis, Business and Industry, Behavioral Diagnostics.
- + **Bakan, Michael B.**, Ph.D., 1993, California at Los Angeles; Associate Professor of Music. 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.**, Ph.D., 1974, Colorado; Associate Professor of Geography. Fields: Behavioral, Environmental, Natural, and Man-Made Hazards; Quantitative Methods.
- + **Baker, Theodore P.**, Ph.D., 1974, Cornell; Professor of Computer Science. 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, Thomas L.**, Ph.D., 1993, Virginia Polytechnic Institute; Associate Professor of Electrical and Computer Engineering. Fields: Advance Power Systems, High Temperature Superconductivity, Network Protection, Power Quality.
- * **Baldyga, Natalya**, Ph.D., 2005, Minnesota, Assistant Professor Theatre. Fields: Theatre Studies.

- + **Bales, William D.**, Ph.D., 1987, Florida State; Associate Professor of Criminology, College of Criminology and Criminal Justice. Fields: sentencing and punishment, effectiveness of correctional practices and programs, recidivism and community reintegration, and educational effects on juvenile delinquency.
- + **Balkwill, David L.**, Ph.D., 1977, Pennsylvania State; Professor Biomedical Sciences, Distinguished Research Professor, 1998-1999. Field: Microbiology.
- + **Banks, David C.**, Ph.D., 1993, North Carolina at Chapel Hill; Associate Professor of Computational Science. Fields: 3D Computer Graphics, Scientific Visualization.
- + **Banoff, Barbara A.**, J.D., 1973, Santa Clara University; Professor of Law. Fields: Agency/Partnership, Business Associations, Corporate Finance, Securities Regulation.
- + **Barrett, Anne E.**, Ph.D., 1999, Duke; Assistant Professor of Sociology. Fields: Mental Health, Family, Aging/Social Gerontology.
- + **Barrilleaux, Charles J.**, Ph.D., 1985, State University of New York, Binghamton; Professor of Political Science. Fields: Policy Analysis, Health Policy, American Politics.
- * **Barth, Vickie R.**, D.E.D., 2003, University of Iowa; Assistant Professor of Nursing and Program Director, School of Nursing. Fields: Adult Health.
- + **Bass, Henry W.**, Ph.D., 1992, North Carolina State; Assistant Professor of Biological Science. Fields: Cell and Molecular Biology; Meiosis, Nucleus Organization, Cytoskeleton in Higher Plants.
- + **Bates, George W.**, Ph.D., 1977, Washington at Seattle; Associate Chair and Professor of Biological Science. Fields: Plant Cell and Molecular Biology, Cell Fusion, Transformation, Recombinant DNA, Plant Cell Culture.
- + **Bathke, Allen W. Jr.**, D.B.A., 1982, Florida State; Associate Professor of Accounting. Fields: Financial Accounting, Cost Accounting, Empirical Accounting Research, Accounting Theory.
- + **Baumeister, Roy F.**, Ph.D., 1978, Princeton; Francis Eppes Professor of Psychology. Fields: Self-control, Choice, Decision Making, Belongingness, Human Sexuality.
- + **Baylor, Amy**, Ph.D., 1997, South Carolina; Associate Professor of Educational Research. Fields: Cognitive Technology, Intelligent Learning Environments.
- * **Beach, King D. III**, Ph.D., 1995, City University of New York; Associate Professor in the Department of Educational Leadership & Policy Studies, College of Education. Fields: Developmental Psychology, Cultural Anthropology, South Asian Studies, relations between informal and formal education.
- + **Beard, Karen A.**, Ph.D., 1988, Texas at Austin; Associate Professor of Art History. Fields: Modern 19th and 20th Centuries.
- + **Beaumont, Paul M.**, Ph.D., 1984, University of Pennsylvania; Associate Professor of Economics. Fields: Econometrics, Regional Economics.
- + **Becker, Betsy Jane**, Ph.D., 1985, Univ. of Chicago, Professor Educational Psychology. Fields: Psychology, Statistics and Meta-Analysis, Psychology Methods, Educational Research.
- + **Beckham, Joseph C.**, J.D., 1977, Florida; Allan Tucker Professor of Educational Policy Studies and Leadership, 2000. Fields: Higher Education, Educational Administration and Legal Issues.
- + **Beckman, Seth V.**, D.A., 1996, Ball State; Assistant Dean and Professor of Music. Fields: Music Education.
- * **Beeler, Cheryl S.**, R.Ed., 1980, Indiana University; Associate Professor of Human Services and Studies. Fields: Management, Fiscal Management, Marketing.
- + **Beerli, Peter**, Ph.D., 1994, Zurich; Assistant Professor of Biological Science, College of Arts and Sciences. Fields: Computational and mathematical biology; evolutionary and population genetics/genomics.
- + **Belieu, Erin C.**, M.A., Visiting Assistant Professor of English, College of Arts and Sciences. Fields: Poetry.
- + **Bellenot, Steven F.**, Ph.D., 1974, Claremont Graduate School; Professor of Mathematics, Field: Functional Analysis.
- + **Benesh, Gary A.**, Ph.D., 1981, Virginia Polytechnic Institute and State University; Associate Professor of Finance. Fields: Corporate Finance, Investments.
- + **Benson, Bruce L.**, Ph.D., 1978, Texas A&M; Professor of Economics, Distinguished Research Professor, 1991-1992. Fields: Economic Theory, Regional Economics, Industrial Organization, Public Finance.
- + **Berg, Bernd**, Ph.D., 1977, Freie Universitat Berlin; Professor of Physics. Fields: Theoretical Physics; Lattice Gauge Theory, Computational Physics.
- + **Berkley, Karen J.**, Ph.D., 1968, Washington; Distinguished Research Professor, 2003-2004, McKenzie Professor and Professor of Psychology. 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.**, Ph.D., 1988, Minnesota; Professor of Public Administration and Policy. Fields: Intergovernmental Relations, State and Local Government, Public Policy, Strategic Management, Policy Innovation.
- + **Berry, Ralph M.**, Ph.D., 1985, Iowa; Professor of English. Fields: Creative Writing, Literary Theory.
- + **Berry, William D.**, Ph.D., 1980, Minnesota; Marian D. Irish Professor of Political Science, 1999. Fields: American Politics, Policy and Methodology.
- + **Bertot, John C.**, Ph.D., 1996, Syracuse; Professor of Information Studies. Fields: Information Policy.
- + **Bertram, Richard**, Ph.D., 1993, Florida State; Associate Professor of Mathematics. Fields: Biomedical Mathematics, Dynamical Systems, Applied Mathematics.
- + **Billings, Bruce**, Ph.D., 1996, Penn State; Associate Professor of Accounting. Field: Financial Accounting.
- * **Bish, Deborah F.**, Ph.D., 1998, Arizona State; Assistant Professor of Music. Fields: Woodwind Performance and Literature.
- + **Bishop, Michael A.**, Ph.D., 1990 Univ. of California - San Diego, Professor Philosophy.
- + **Blaber, Michael**, Ph.D., 1990, California at Irvine; Professor Biomedical Sciences. Fields: Biochemistry, Protein Structure and Function.
- + **Black, Catherine M.**, Ph.D., 1993, Minnesota; Associate Professor of Textiles and Consumer Sciences. Fields: Apparel Design, Functional and Aesthetic Apparel Design, Computer Applications in Apparel Design.
- * **Blakely, George C.**, M.F.A. Professor of Studio Art. Field: Photography.
- * **Blaufarb, Rafe**, Ph.D., 1996, Michigan, Professor, History. Fields: Revolutionary and Napoleonic France, Latin American Independence.
- + **Blessing, Susan K.**, Ph.D., 1988, Indiana; Associate Professor of Physics. Fields: Experimental Physics and Elementary Particle Physics.
- + **Blomberg, Thomas G.**, D.Crim., 1974, California at Berkeley; Sheldon L. Messinger Professor of Criminology, 2001, and Associate Dean of Criminology and Criminal Justice. Fields: Criminology, Victimology, Law and Social Control.
- * **Bloom, James J.**, Ph.D., 2002, Duke; Assistant Professor of Art History, School of Visual Arts and Dance. Fields: Early Modern Northern European Art.
- + **Boebinger, Gregory**, Ph.D., 1986, MIT, Professor Physics. Fields: Magnetotransport studies of the fractional quantum Hall effect at dilution refrigerator temperatures in magnetic fields to 30 tesla.
- + **Boehrer, Bruce T.**, Ph.D., 1986, Pennsylvania; Bertram H. Davis Professor of English, 2001. Fields: English Renaissance Literature, Creative Writing.
- * **Boggs, H. Glenn, II**, J.D., 1975, Florida State; Professor of Risk Management/Insurance, Real Estate and Business Law. Fields: Real Estate Law and Broker/Salesman Licensure, Business Law.
- * **Bojczyk, Kathryn E.**, Ph.D., 2004, Purdue; Assistant Professor of Family and Child Sciences, College of Human Sciences. Fields: Associations between mothers' beliefs, practices and children's emergent literacy skills; parents' and teachers' beliefs about books reading with preschoolers; parent-child relationships.
- * **Bokhari, Farasat**, Ph.D. 2001 Caregie Mellon Asst. Professor, Economics. Fields: Health economics, industrial organization.
- * **Bolanos, Carlos A.**, Ph.D., 2000, Northeastern; Assistant Professor of Psychology, College of Arts and Sciences. Fields: Neuroscience, Neurobiology of Drug Addiction, Neuropsychopharmacology.
- + **Bonesteel, Nicholas E.**, Ph.D., 1991, Cornell University; Associate Professor of Physics. Fields: Condensed Matter Theory, Many Body, Magnetism, Quantum Hall Effect.
- + **Bonn, Mark A.**, Ph.D., 1982, Texas A&M; Professor of Hospitality. Fields: Tourism Marketing and Research.
- + **Boroto, Daniel R.**, Ph.D. 1972, Connecticut; Associate Professor of Psychology. Fields: Psychotherapy Theory and Research, Personality and Social Psychological Applications to Psychotherapy and Consultation, Applied Personality Theory.
- + **Bosselman, Robert H.**, Ph.D., 1985, Oklahoma State University; Program Director and Dedman Professor of Hospitality. Field: Hospitality Administration.
- + **Bourassa, Mark A.**, Ph.D., 1994, Purdue; Assistant Professor of Meteorology. Fields: Remote Sensing of the Ocean Surface, Modeling of the Atmospheric and Aqueous Surface Fluxes, Applications of Air/Sea Interaction.
- + **Bourgeois, Michelle S.**, Ph.D., 1988, Pittsburgh; Professor of Communication Disorders, College of Communication. Fields: Adult Neurogenetics; Dementia; Treatment research.
- + **Boutin, Aimee M.C.**, Ph.D., 1998, Cornell; Associate Professor of Modern Languages and Linguistics. Field: Nineteenth-century Literature.
- + **Bowen, Paul**, Ph.D., 1991, Tennessee, Associate Professor Business Admin. Fields: The measurement, control, and improvement of information quality; software reliability; identification and classification of data errors; end-user information search and retrieval.
- + **Bower, Beverly L.**, Ph.D., 1992, Florida State; Associate Professor of Educational Leadership. Fields: Higher Education Administration, Community College Philosophy and Leadership.
- + **Bowers, Judy K.**, Ph.D., 1990, Louisiana State; Professor of Music. Fields: Music Education, Choral Music.
- + **Bowers, Philip L.**, Ph.D., 1983, Tennessee; Dwight B. Goodner Professor of Mathematics, 2002, and Associate Chair of Mathematics. Fields: Geometric Topology, Geometry.
- + **Bowman, James S.**, Ph.D., 1973, Nebraska; Professor of Public Administration and Policy. Fields: Human Resource Administration, Professional Ethics, Japanese Management.
- * **Bradley, Robert B.**, Ph.D., 1977, Florida; Professor of Public Administration and Associate Vice President for Research. Fields: Public Policy, Budgeting, Intergovernmental Relations, Research Methods, Science and Technology Policy.
- + **Brady, Michael K.**, Ph.D., 1997, Florida State; Assistant Professor of Marketing, College of Business. Fields: Managing the service decision-making process, managing service recovery, and strategic ramifications of branding for service firms.
- + **Brewer, Charles E.**, Ph.D., 1984, City University of New York; Associate Professor of Music. Field: Musicology/Music Literature.
- + **Brewster, Karin L.**, Ph.D., 1991, Washington; Associate Professor of Sociology. Fields: Population, Family, Social Stratification.
- + **Bridgeman, Curtis**, J.D., 2003, Vanderbilt; Ph.D., 2001, Vanderbilt; Assistant Professor of Law. Fields: Contracts, Commercial Law, Bankruptcy Law, Creditors' Rights, Jurisprudence, Philosophy of Private Law.
- + **Bridger, Carolyn A.**, D.M.A., 1977, Iowa; John Boda Professor of Music, 2002. Fields: Piano Performance, Accompanying.
- * **Brister-Rachwal, Wanda**, D.M.A., 2002, University of Nevada; Assistant Professor, Music. Fields: Voice Performance/Literature.
- + **Brooks, James S.**, Ph.D., 1973, Oregon; Grace C. and William G. Moulton Professor of Physics, 2002. Fields: Condensed Matter Experiment, Low Temperature, High Magnetic Field Phenomena, Organic Conductors.
- + **Brooks, Jeffrey S.**, Ph.D., 2003, Missouri; Assistant Professor, Educational Leadership and Policy Studies, College of Education. Fields: Socio-Cultural aspects of Ed. Leadership & K-12 Re-Form.

- + **Brower, Ralph S.**, Ph.D., 1995, SUNY - Albany; Associate Professor of Public Administration. Fields: Organizational Behavior and Theory, Research Methods.
- * **Brown, Atiya Kai**, Ph.D. 2004, Maryland, Assistant Professor, Political Science. Fields: American Politics, race/ethnicity, gender, campaigns and elections and state politics.
- + **Brown, Jeffrey R.**, Ph.D., 2003, California at Los Angeles; Assistant Professor of Urban and Regional Planning, College of Social Sciences. Fields: Transportation finance, surface transportation policy, and the relationship between transportation and the built environment.
- * **Brown, Sarah D.**, Ph.D., 2004, Indiana; Assistant Professor of Middle and Secondary Education, College of Education Social Science Education. Fields: History & Social Science Education, Historical Cognition, History of Education.
- + **Brummel-Smith, Kenneth**, MD, 1975, USC, Professor, Geriatrics. Fields: Geriatrics.
- + **Bruschweiler, Rafael P.**, Ph.D., 1991, ETH Zurich-Smitzerland, Professor, Chemistry. Fields: Biomolecular NMR, Protein structure, dynamics & function, Protein-ligand interactions, Metabolomic analysis, Computer simulations of proteins.
- + **Brusco, Michael J.**, Ph.D., 1990, Florida State; Professor of Marketing, College of Business. Fields: Workforce Scheduling, Optimal and Heuristic Solutions Methods.
- + **Brymer, Robert A.**, Psy.D., 1980, University of Denver; Professor of Hospitality. Fields: Hospitality Industry.
- + **Buchler, Michael H.**, Ph.D., 1998, University of Rochester, Eastman School of Music; Assistant Professor of Music. Field: Music Theory.
- + **Bullington, Bruce**, Ph.D., 1974, California at Los Angeles; Associate Professor of Criminology and Criminal Justice. Fields: Correctional Counseling, Criminology, Drugs, Drug Users and the Justice System; European Criminal Justice: the Dutch; History of Justice Systems, Native American Justice System.
- + **Bunea, Florentina**, Ph.D., 2000, Washington; Assistant Professor of Statistics. Fields: Model Selection and Averaging in Nonparametric and Semiparametric Settings, Post Model Selection Inference, Empirical Processes.
- * **Bunz, Ulla**, Ph.D., 2002, Kansas, Assistant Professor Communication. Fields: technological aptitude, social effects of new communication technologies, social construction of technologically mediated communication, instructional technology.
- * **Burggraf, Ray L.**, M.F.A., 1970, California at Berkeley; Professor of Studio Art. Field: Painting.
- + **Burke, Darrell E.**, Ph.D., 2002, Virginia Commonwealth; Assistant Professor of Information Studies. Fields: Determining the Antecedents and Outcomes of Health Information Technology Adoption, Developing Measurements of Health Information Technology Strategy.
- + **Burke, Helen M.**, Ph.D., 1990, Southern Mississippi; Associate Professor of English. Fields: Eighteenth-century British and Irish Literature, Literary Theory.
- + **Burkhead, E. Jane**, Ph.D., 1980, Missouri; Associate Professor of Human Services and Studies. Fields: Career Development of Disabled Persons, Psychosocial Aspects of Disability, Wellness Programming.
- + **Burmester, Michael V.D.**, Ph.D., 1966, University of Rome; Professor of Computer Science. Fields: Cryptography, Computer Security, Network Security, Discrete Mathematics.
- + **Burnett, Gary D.**, Ph.D., 1988, Princeton University. Associate Professor of Information Studies. Fields: Analysis, Information Graphics, Learning Resources, and Web Development.
- + **Burnett, Kathleen M.**, Ph.D., 1989, California at Berkeley; Associate Dean and Associate Professor of Information Studies. Fields: Organization of Information, Information Technology, Information Design, Rare Books and Art Librarianship.
- + **Burnett, William C.**, Ph.D., 1974, Hawaii; Carl Henry Oppenheimer Professor of Oceanography, 2002. 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.**, Ph.D., 2002, Georgia State; Assistant Professor of Information Science and Management. Fields: E-business Strategy, Supply Chain Management, IS Strategy.
- * **Butler, David M.**, M.A. Chair and Associate Professor of Interior Design, Visual Arts and Dance. Fields: Lighting Design, Business Principles, Practices and Licensure.
- + **Butler, Robert Olen**, M.A. Francis Eppes Professor of English holding Michael Shaara Chair of Creative Writing. Fields: Creative Writing (fiction and screenplays).
- + **Cai, Ming**, Ph.D., 1990, Illinois, Associate Professor of Meteorology, College of Arts and Sciences. Fields: Climate Dynamics, Atmospheric Dynamics, Coupling of the Stratosphere and Troposphere, Dynamics and Thermodynamics of Global Warnings, Climate Prediction, Coupled Data Assimilation.
- + **Cairns, Francis J.**, Ph.D., 1982, Liverpool; Professor of Classics, College of Arts and Sciences. Fields: Greek & Latin Poetry, Medieval & Renaissance Latin Literature, Greek Epigraphy.
- + **Callender, Clifton**, Ph.D., 1999, Chicago; Assistant Professor of Music. Fields: Music Theory.
- + **Cao, Jianming**, Ph.D., 1996, Rochester; Assistant Professor of Physics. Fields: Experimental Physics, Condensed Matter, Femtosecond Ultrafast Dynamics.
- + **Cappuccio, Brenda Logan**, Ph.D., Kentucky; Associate Chair and Associate Professor of Modern Languages and Linguistics. Fields: Hispanic Poetry, Contemporary Peninsular Literature.
- + **Capstick, Simon Charles**, Ph.D., 1986, Toronto; Associate Professor of Physics. Fields: Theoretical Nuclear and Particle Physics.
- + **Carbonell, Joyce L.**, Ph.D., 1978, Bowling Green State; Professor of Psychology. Fields: Sex Roles and Leadership, Prediction of Career Criminal Behavior, Classification Systems for Prison Inmates, Sex Roles and Depression.
- + **Carlson, Elwood D.**, Ph.D., 1978, California at Berkeley; Professor and Director, Demography and Population Health, College of Social Sciences. Fields: Demography, Family, Political Economy.
- + **Carroll, Pamela S.**, Ed.D., 1989, Auburn; Professor of Middle and Secondary Education. Fields: English Education.
- + **Carson, James M.**, Ph.D., 1993, Georgia; Payne H. and Charlotte Hodges Midyette Eminent Scholar in Insurance and Professor of Risk Management and Insurance. Fields: Mortality-contingent Product and Cost Issues, Empirical Analyses of Insurer Solvency, and Insurance Applications of Agency Theory.
- * **Carter, Pamela E.**, Ph.D., 2000, Assistant Professor, Management Information Systems. Fields: Diffusion of Complex Technologies; Meaning and Interpretation of/within Information Systems; Collaborative Project Management; IS Infrastructure Management (including data, information, and knowledge).
- + **Cartes, David A.**, Ph.D., 2000, Dartmouth College; Assistant Professor of Mechanical Engineering. Fields: Dynamics; Controls; Power Engineering.
- + **Case, Bettye Anne**, Ph.D., 1969, Alabama; Professor of Mathematics. Fields: Univalent and Quasi-analytic Functions, Teaching of College Mathematics.
- + **Celec, Stephen E.**, Ph.D., 1976, North Carolina at Chapel Hill; Professor of Finance. Fields: Corporate Finance.
- + **Chandra, Namas**, Ph.D., 1986, Texas A&M; Krishnamurty Karamcheti Professor of Engineering, 2000, and of Mechanical Engineering. Fields: Finite-Element Methods, Solid Mechanics, Superplastic Metal Forming, Materials and Plasticity.
- + **Chang, Jie J.**, Ph.D., 1988, Calgary; Associate Professor of Electrical and Computing Engineering, College of Engineering. Fields: Advanced power converters; power electronics systems; high-performance, high-power motor drives; electrical motor diagnostics.
- + **Chanton, Jeffrey Paul**, Ph.D., 1985, North Carolina at Chapel Hill; John Widmer Winchester Professor of Oceanography, 2002, and Professor of Oceanography and Geological Sciences. Fields: Coastal Processes Involving Cycling of Major Elements, Carbon, Sulfur, Oxygen, Nitrogen, and Iron; Fluxes of Gases from Wetland Soils.
- + **Chapin, Timothy S.**, Ph.D., 1999, Washington; Assistant Professor of Urban and Regional Planning, College of Social Sciences. Fields: Geographic Information Systems, Planning Methods, Infrastructure, Economic Development, Urban Revitalization.
- + **Chapo, Eliot**, Professor of Music. Fields: Violin Performance, String Literature.
- * **Chappell, Fred D.**, B.A., Professor of Theatre. Fields: Acting and Directing.
- + **Charness, Neil H.**, Ph.D., 1974, Carnegie-Mellon University; Professor of Psychology. 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, Prescott B.**, Ph.D., 1984, Southern California; Associate Professor of Biological Science. Fields: Biomechanics of Cardiac and Skeletal Muscle, Bionanotechnology.
- + **Chassignet, Eric**, Ph.D., 1988, Miami, Professor, Oceanography. Fields: General ocean circulation, ocean prediction, coupled ocean-atmosphere modeling, climate variability, subgrid scale parameterizations, process studies.
- * **Chella, Ravindran**, Ph.D., 1984, Massachusetts at Amherst; Associate Professor of Chemical Engineering. Fields: Polymer Mixing, Composites and Blends, Reactive Mixing.
- + **Chen, Chi-Kai**, Ph.D., 1997, Virginia, Assistant Professor, Chemical & Biomedical Engineering. Fields: Neural tissue engineering, extrasynaptic transmission, cancer therapy, and tumor physiology.
- + **Chen, Ching-Jen**, Ph.D., 1967, Case Western Reserve University; Professor of Mechanical Engineering and Mathematics, and Dean, College of Engineering. Fields: Heat Transfer and Computational Fluid Mechanics.
- * **Chen, Gang**, Ph.D., 2002, Oklahoma, Assistant Professor, Civil and Environmental Engineering. Fields: Water flow and solute transport in the vadose zone, sorption kinetics and transport of organic chemicals, colloids and microorganisms, colloid-facilitated transport of radionuclides, bioremediation kinetics, genetic microbiology, and interfacial phenomena.
- * **Cheng, Yingmei**, Ph.D., 2001, Pennsylvania; Assistant Professor of Finance. Fields: Capital Markets, Market Efficiency, Mergers and Acquisitions, Security Analysis.
- + **Chicken, Eric K.**, Ph.D., 2001, Purdue; Visiting Assistant Professor of Statistics. Fields: Nonparametric Statistics, Computational Statistics.
- + **Childs, Matthew D.**, Ph.D., 2001, Texas at Austin; Assistant Professor of History. Fields: Latin America, Caribbean.
- + **Chiorescu, Irinel**, Ph.D., 2000, Louis Neel Lab., Assistant Professor, Physics. Fields: quantum effects at nanoscopic scale; spin dynamics in two possible cases: magnetic molecules and superconducting flux qubits.
- + **Chiricos, Theodore G.**, Ph.D., 1968, Massachusetts; Professor of Criminology and Criminal Justice. Fields: Criminology, Criminological and Sociological Theory.
- + **Christiansen, William A.**, Ph.D., 1989, Utah; Associate Professor of Finance., Field: Financial Institutions and Markets.
- + **Christie, Donna R.**, J.D., 1978, Georgia; Elizabeth C. and Clyde W. Atkinson Professor of Law and Associate Dean for International Programs. Fields: Environmental Law, Natural Resources Law, Ocean and Coastal Law, Land Use Regulation.
- + **Chudoba, Katherine M.**, Ph.D., 1993, Arizona; Assistant Professor of Information Management Sciences. Fields: Organizational Impacts of Groupware Technologies.
- + **Claggett, William**, Ph.D., 1978, Minnesota; Associate Professor of Political Science. Fields: Statistical Analysis, Electoral Behavior, Political Parties.

- + **Clark, Jeffrey A.**, Ph.D., 1980, Illinois; Professor of Finance, Field: Financial Institutions and Markets.
- * **Clark, Kathleen M.**, Ph.D., 2006, University of Maryland, Assistant Professor Mathematics Education.
- * **Clark, Robert C.**, Ed.D., 1974, Tennessee at Knoxville; Associate Professor of Elementary and Early Childhood Education and Practice, and Associate Dean, College of Education. Fields: Mathematics Education, Computer Education.
- + **Clarke, Allan J.**, Ph.D., 1976, Cambridge; Distinguished Research Professor, 2000-2001, Adrian E. Gill Professor of Oceanography, 2001. 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.**, M.M., Professor of Music. Fields: Violin Performance, String Literature.
- + **Clary, Richard S.**, D.M.A., Professor, School of Music. Fields: Music Education/Conducting.
- + **Clayson, Carol A.**, Ph.D. 1995, Colorado; Associate Professor of Meteorology and Program Director. Fields: Atmosphere/Ocean Interaction, Boundary Layer Processes.
- + **Clendinning, Jane Piper**, Ph.D., 1989, Yale; Associate Professor of Music. Field: Music Theory.
- + **Cloonan, William**, Ph.D., 1970, North Carolina at Chapel Hill; Richard L. Chapple Professor of Modern Languages and Linguistics, 1999. Fields: Seventeenth Century French Literature, the European Novel in the Twentieth Century, Comparative Literature.
- * **Close, Billy R.**, Ph.D., 1997, Florida State; Assistant Professor of Criminology and Criminal Justice. Fields: Minorities, Crime and Social Policy, Ethnicity and Methodology in the Humanities and Social Sciences.
- + **Cloud, Rinn M.**, Ph.D., 1978, North Carolina at Greensboro. Chair and Professor of Textiles and Consumer Sciences. Fields: Physical/Mechanical Properties of Textiles, Barrier Effectiveness of Protective Clothing Fabrics, Comfort and Health Effects of Textile Products.
- + **Coats, Pamela K.**, Ph.D., 1978, Nebraska at Lincoln; Robert C. Earnest Professor of Finance, 2002. Fields: Corporate Finance, Financial Modeling.
- + **Cobbe, James H.**, Ph.D., 1977, Yale; Chair and Professor of Economics. Fields: Economic Development, International Economics, Labor Economics, Comparative Systems.
- + **Cogan, Nick**, Ph.D., 2003, University of Utah, Assoc. Professor, Mathematics. Fields: Biomedical mathematics, Biofluids, Applied Mathematics.
- + **Cohen-Vogel, Lora**, Ph.D., 2002, Vanderbilt; Assistant Professor of Educational Leadership and Policy Studies. Fields: Politics & Policy of Education, Political Analysis, School Governance, Ed. Accountability.
- * **Cole, Cassandra R.**, Ph.D., 2001, Georgia; Assistant Professor of Risk Management and Insurance. Fields: Insurance regulation, employee benefits, fraud, and risk management.
- * **Coleman, Robert H.**, M.F.A., Assistant Professor of Theatre. Field: Technical Direction.
- + **Collier, John**, Ph.D., 1996, Case Institute, Professor Chemical and Biomedical Engineering. Fields: Polymers, textiles, fluid flow, and whisky.
- + **Collins, Emmanuel**, Ph.D., 1987, Purdue; Associate Chair and Professor of Mechanical Engineering. Fields: Controls and Dynamics.
- + **Combs, James G.**, Ph.D., 1995, Louisiana State; Associate Professor of Management, College of Business. Fields: Antecedents and Consequences of Franchising, Executive Compensation, Corporate Governance.
- + **Conner, Carol M.**, Ph.D., 2002, Michigan; Assistant Professor, Elementary and Early Childhood Education, College of Education. Fields: Reading, Communication Skills, Literacy Skills, Education of Children who are Deaf and Hard of Hearing or who have Learning Disabilities.
- + **Connerly, Charles E.**, Ph.D., 1980, Michigan; William G. and Budd Bell Professor of Urban and Regional Planning, 2002, and Chair of Urban and Regional Planning. Fields: Housing and Community Development, Neighborhood Theory, Economic Development, Policy Analysis.
- + **Contreras, Robert J.**, Ph.D., 1975, Michigan State; James C. Smith Professor of Psychology, 2002, and Director of Neuroscience. Fields: Neural and Hormonal Substrates of Behavior, Appetite, Obesity, and Hypertension, Behavioral and Neural Studies of Taste.
- + **Cooper, Mark G.**, Ph.D., 1998, Brown; Associate Professor of English. Fields: U.S. Cinema, Visual Cultural Studies, Feminism, 20th Century U.S. Culture and Political Economy.
- * **Cooper, Martha**, MFA, 1977, Michigan State Univ., Associate Professor, Theatre. Fields: Costume Technology.
- + **Cooper, William T., III**, Ph.D., 1981, Indiana; Professor of Chemistry and Biochemistry. Fields: Chromatography, Environmental Biogeochemistry of Organic Compounds in Natural Waters, Surface Chemistry on Minerals, Marine Organic Geochemistry.
- + **Corbett, Richard B.**, Ph.D., 1974, Georgia State; Professor of Risk Management/Insurance, Real Estate and Business Law. Fields: Property and Liability Insurance, Risk Management, Insurance Coverages.
- + **Cornille, Thomas A.**, Ph.D., 1981, Florida State; Associate Professor of Family and Child Sciences. Fields: Addictions, Social Support.
- + **Corrigan, John A.**, Ph.D., 1982, Chicago; Edwin S. Gaustad Professor of Religion, 2000. Fields: American Religious History, Religion and Emotion, Theory and Method in the Academic Study of Religion.
- * **Cortese, Juliann**, Ph.D., 2005, Ohio State, Assistant Professor, Communication. Fields: Media uses and effects, hypermedia learning, computer-mediated communication, internet use, new technologies.
- + **Corzine, Michael L.**, D.M.A., 1979, Eastman School of Music. Professor of Music. Fields: Organ Performance, Keyboard Literature.
- + **Costa, M. Victoria**, Ph.D., 2003, Universidad Nacional de Plata, Assistant Professor Philosophy.
- + **Cottle, Paul D.**, Ph.D., 1986, Yale; Professor and Director, University Honors Program, Undergraduate Studies. Fields: Experimental Physics, Heavy-Ion Nuclear Physics.
- * **Cottrell, Barbara H.**, M.S.N. Associate Professor of Nursing. Fields: Maternity Nursing, Birth, Women and Infants Health.
- + **Coursey, David**, Ph.D., 1990, Syracuse; Associate Professor of Public Administration and Policy. Fields: Management Information Systems, Research Methods, Science and Technology Policy, Public Management.
- * **Coutts, Christopher J.**, Ph.D. 2006, University of Michigan, Assistant Professor, Urban & Regional Planning.
- + **Craig, Robin K.**, J.D., 1996, Lewis & Clark College; Ph.D., 1993, Cal. Santa Barbara; Attorneys' Title Insurance Fund Professor of Law. Fields: Environmental Law, Water Law, Ocean and Coastal Law, Administrative Law, Civil Procedure, Property, Bioethics and Biotechnology.
- + **Crede, Volker**, Ph.D., 2000, University of Bonn, Assistant Professor, Physics. Fields: Experimental Nuclear Physics; Particle Physics.
- + **Creswell, Michael**, Ph.D., 1997, Chicago; Assistant Professor of History. Fields: Contemporary Europe (France Emphasis), International Politics, Cold War History, Military Affairs.
- + **Crew, Robert E., Jr.**, Ph.D., 1970, North Carolina; Professor, Political Science, and Associate Dean, College of Social Sciences. Fields: Public Management, Public Policy, Program Evaluation and Criminal Justice Policy.
- + **Cronin, J. Joseph, Jr.**, Ph.D., 1981, Ohio State; Professor of Marketing. Fields: Marketing Strategy, Service Marketing, Retail Marketing.
- + **Crook, Wendy P.**, Ph.D., 1996, Rutgers; Associate Professor of Social Work. Fields: Organizational Theory, Administrative Practice, Policy Analysis, Program Evaluation, Homelessness, Disabilities and Family Violence.
- + **Cross, Timothy A.**, Ph.D., 1981, Pennsylvania; Distinguished Research Professor, 2000-2001, Earl Frieden Professor of Chemistry and Biochemistry, 2002. Fields: Structure and Dynamics of Gramicidin A in a Lipid Bilayer of Solid-State N15 and H1 Nuclear Magnetic Resonance.
- + **Crow, Gary M.**, Ph.D., 1985, University of Chicago, Professor, Educational Leadership/Admin. Fields: Educational Leadership, Principals, School Reform, Professional and Organizational Socialization.
- + **Cuevas, Bryan J.**, Ph.D., 2000, Virginia; Assistant Professor of Religion. Fields: Asian Religious Traditions, Tibetan and Himalayan Buddhism.
- * **Cui, Ming**, Ph.D., 2003, Iowa State, Assistant Professor, Family, Child & Consumer Sciences.
- + **Cunningham, Philip**, Ph.D., 2000, Albany; Assistant Professor of Meteorology, College of Arts and Sciences. Fields: Dynamic and Synoptic Meteorology, Geophysical Fluid Dynamics.
- * **Curenton, Stephanie M.**, Ph.D., 2002, Virginia; Assistant Professor, Family and Child Sciences, College of Human Sciences. Fields: Early care and education issues, public policies related to low-income children's well-being.
- + **D'Alemberte, H. Talbot**, J.D., 1962, Florida; President Emeritus and Professor of Law. Fields: State Constitutional Law, Supreme Court Role-playing.
- + **Dahl, Mary K.**, Ph.D., 1984, Stanford; Professor of Theatre. Fields: Continental Drama and British Theatre.
- + **Daileader, Celia**, Ph.D., 1996, Brandeis University, Associate Professor, English. Fields: Renaissance Literature, Feminist Theory and Criticism, Critical Race Studies, and Renaissance and Contemporary Drama.
- + **Dalal, Nar S.**, Ph.D., 1971, British Columbia; Dirac Professor of Chemistry and Biochemistry, 2001, Distinguished Research Professor, 2002-2003, and Chair of Chemistry and Biochemistry. Fields: Physical Chemistry and Materials Science, Applications for High Magnetic Fields in Chemistry and Physics.
- + **Dalton, Jon C.**, Ed.D., 1975, Kentucky; Associate Professor of Educational Leadership, Director, Center for the Study of Values in College Student Development. Field: Higher Education Administration.
- + **Dalton, Peter C.**, Ph.D., 1972, Rochester; Associate Professor of Philosophy. Fields: Modern Philosophy (1600-1900), Ethics, Metaphysics, Metaphilosophy.
- + **Dancy, Russell M.**, Ph.D., 1966, Harvard; Professor of Philosophy. Fields: Ancient Greek Philosophy, Philosophy of Language, Metaphysics, Philosophy of Science.
- * **Dangli, Arif**, Ph.D., 2005, FSU, Instructor, Information Studies.
- + **Darabi, Abbas**, Ph.D., 1981, Florida State; Assistant Professor and Associate Program Director of Educational Research, Learning Systems Institute. Fields: Program Evaluation, Systems Theory, Performance Improvement, Performance Technology.
- + **Darke, Peter R.**, Ph.D., 1993, University of Toronto, Assistant Professor, Business Administration. Fields: Consumer attitudes, judgement and decision making. Economic and psychological factors in risk taking.
- + **Darling, Carol Anderson**, Ph.D., 1979, Michigan State; Margaret Rector Sandels Professor of Human Sciences, 1999, Distinguished Teaching Professor, 1996-1997, and Professor of Family and Child Sciences. Fields: Human Sexuality, Parent-Child Interaction, Family Crises, Work and the Family.
- + **Darrow, Alice-Ann**, Ph.D., 1983, Florida State; Professor, School of Music. Fields: Music Education/Therapy.
- + **Darst, David H.**, Ph.D., 1970, Kentucky; Professor of Modern Languages and Linguistics. Fields: Spanish Golden Age Literature, Renaissance and Baroque Humanities.
- + **Davenport, Melanie**, Ph.D., 2001, Indiana University, Assistant Professor, Art Education. Fields: Art Education.
- + **Davis, Frederick R.**, Ph.D., 2001, Yale; Assistant Professor of History. Fields: U.S. Science, Environmental History.
- * **Davis, Lynda J.**, M.F.A. Professor of Dance. Fields: Contemporary Dance Technique, Contemporary Dance Repertory, Choreography.
- + **Davis, Nancy T.**, Ph.D., 1988, Georgia; Associate Professor of Middle and Secondary Education. Fields: Science Education.
- + **Day, Matthew C.**, Ph.D., 2003, Brown; Assistant Professor, Religion, College of Arts and Sciences.

- + **de Grummond, Nancy T.**, Ph.D., 1968, North Carolina at Chapel Hill; M. Lynette Thompson Professor of Classics, 1999. Fields: Classical Archaeology and Etruscology.
- + **de Larena, Lorelei R.**, J.D., 1996, Columbia; Assistant Professor of Law. Fields: Intellectual Property, Contracts, Alternative Dispute Resolution.
- + **De Medeiros, Breno F.**, Ph.D., 2004, John Hopkins; Assistant Professor, Computer Science, College of Arts and Sciences. Fields: Applied Cryptography, Network Security, Information Security and Privacy.
- + **DeBrunner, Linda**, Ph.D., 1991, Virginia Tech, Associate Professor, Electrical Engineering.
- + **DeBrunner, Victor**, Ph.D., 1990, Virginia Tech., Professor, Electrical Engineering.
- + **DeHaven-Smith, Lance M.**, Ph.D., 1980, Ohio State; Professor of Public Administration and Policy and Director, Florida Institute of Government. Fields: Public Policy, Political Theory.
- + **Delano, Monica**, Ph.D., 2003, Virginia, Assistant Professor, Special Education. Fields: Special Education, Autism, Severe or Profound Disabilities.
- + **Delp, Roy E.**, M.M., 1967, New England Conservatory. Walter S. James Professor of Voice, 2001, and Professor of Music. Fields: Voice Performance, Voice Literature.
- + **Deng, Wu-Min**, Ph.D., 1997, Univ. of Edinburgh, Assistant Professor, Biological Science. Fields: Oocyte polarity, Drosophila dystroglycan and muscular dystrophy.
- + **Dennen, Vanessa P.**, Ph.D., 2001, Indiana; Assistant Professor of Educational Psychology, College of Education. Fields: Distance Learning, Communities of Practice, Blogging, Online Community.
- + **Dennis, Lawrence C.**, Ph.D., 1979, Virginia; Professor and Dean, Information Studies, College of Information. Fields: Experimental Physics; Heavy-Ion Nuclear Physics, Electron Scattering.
- + **Dewar, William K.**, Ph.D. 1983, Massachusetts Institute of Technology; Pierre Welander Professor of Oceanography, 2001, and Faculty Associate, School of Computational Science and Information Technology. 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.**, Ph.D., 1987, State University of New York at Syracuse; Professor of Urban and Regional Planning. Fields: Environmental Policy Analysis and Planning, Solid and Hazardous Waste Management, Coastal Planning, Water Resources Management.
- + **Diskin, Barry A.**, Ph.D., 1982, Georgia State; Professor of Risk Management/Insurance, Real Estate and Business Law. Fields: Real Estate Valuation, Computer Applications to Real Estate, Valuation Analysis.
- + **Dittmar, Thorsten**, Ph.D., 1999, Bremen, Assistant Professor of Oceanography, College of Arts and Sciences. Fields: Marine Biogeochemistry, Molecular Tracer Techniques, Major Element Cycling in Coastal Zones (Mangroves) and Polar Oceans (Arctic Ocean, Antarctica).
- + **Dixon, John R.**, Ph.D., 2003, Wisconsin; Visiting Assistant Professor of Statistics, College of Arts and Sciences. Fields: Semiparametric Inference, Empirical Processes, Biostatistics, Computational Statistics.
- * **Dixon, Marc**, Ph.D., 2005, Ohio State, Assistant Professor, Sociology. Fields: Collective Behavior and Social Movements; Sociology of Work and Labor.
- + **Doan, Peter L.**, Ph.D., 1988, Cornell; Associate Professor of Urban and Regional Planning. Fields: Planning for Underdeveloped and Developing Regions, Regional Economic Development, Rural Development.
- + **Dobrosavljevic, Vladimir**, Ph.D., 1988, Brown; Associate Professor of Physics. Fields: Condensed Matter Theory, Disordered Systems and Glasses, Metal-insulator Transition.
- + **Dodge, Joseph M., III**, LL.B., 1967, Harvard; LL.M., 1973, New York University; Stearns Weaver Miller Weissler Alhadeff & Sitterson Professor of Law. Fields: Federal Income Taxation, Estate & Gift Tax, Gratuitous Transfers, International Tax, Tax Policy.
- + **Doerner, William G.**, Ph.D., 1977, Tennessee; Professor of Criminology and Criminal Justice. Fields: Ecology of Crime, Juvenile Delinquency, Law Enforcement and Victimology.
- + **Donoghue, Joseph F.**, Ph.D., 1981, Southern California; Associate Professor of Geological Sciences. Fields: Geology of continental margins and coastal environments, causes and effects of sea-level change, Quaternary dating methods, seismic stratigraphy, radiochemical tracers for sediment transport and deposition, environmental geology.
- + **Doran, Glen H.**, Ph.D., 1980, California at Davis; Professor of Anthropology. Fields: North American Prehistory, Archaeological Method and Theory, Paleodemography, Human Osteology.
- * **Doran, James S.**, Ph.D., 2004, Texas-Austin, Assistant Professor, Business Administration. Fields: Derivatives, empirical asset pricing and investments.
- * **Dorsey, Jodee L.**, Ph.D., 1976, Tennessee; Associate Professor of Nutrition, Food, and Exercise Science. Fields: Metabolic Aspects of Obesity, Nutrient/Drug Interaction.
- + **Dorsey, John G.**, Ph.D., 1979, Cincinnati; Katherine Blood Hoffman Professor of Chemistry and Biochemistry, 2000. Fields: Analytical Separations, Especially Liquid Chromatography and Capillary Electrophoresis, Theory, Retention Processes, Quantitative Structure-retention Relationships, Physicochemical Measurements, Analytical Applications of Organized Media.
- + **Dougherty, Ralph C.**, Ph.D., 1963, Chicago; Professor of Chemistry and Biochemistry. Fields: Immunoassay and Mass Spectrometry Applied to Problems in Human and Environmental Health, Absolute Asymmetric Synthesis.
- + **Douglas, Ceasar**, Ph.D., 1997, Mississippi; Assistant Professor of Management. Fields: Leadership, Leader Political Behavior, Work Team Development, Temporary Workforce Issues.
- + **Douglas, Ian W.**, Ph.D., 1996, Glasgow Caledonian University; Assistant Professor and Assistant Program Director of Computer Science. Fields: Human-computer interaction; computer-based learning; graphical user interfaces.
- * **Downs, Phillip E.**, Ph.D., 1976, North Carolina at Chapel Hill; Professor of Marketing. Fields: Research Design, Marketing Research, Marketing Strategy.
- + **Dresang, Eliza T.**, Ph.D. 1981, University of Wisconsin-Madison. Professor of Information Studies. Fields: Information Seeking Behavior, Multimedia Information Systems, Telecommunications, School Library Media, Resources for Children and Young Adults.
- + **Drew, John R.**, D.M.A. 1978, University of Kentucky. Professor of Music. Fields: Trombone Performance, Brass Literature.
- + **Driscoll, Marcy P.**, Ph.D., 1978, Massachusetts; Leslie J. Briggs Professor of Educational Research, 2002, and Chair of Educational Psychology and Learning Systems. Fields: Learning and Instructional Theory, Educational Semiotics, Qualitative Research Methods.
- + **Duan, Zhenhai**, Ph.D., 2003, Minnesota; Assistant Professor of Computer Science, College of Arts and Sciences. Fields: Computer Networks, Multimedia Applications.
- + **Dudley, Gregory B.**, Ph.D., 2000, Massachusetts Institute of Technology; Visiting Assistant Professor of Chemistry and Biochemistry. Fields: Natural Products Synthesis, Organic Chemistry, Applications of Synthesis to Medicinal Chemistry Research.
- + **Dudley, Lynn M.**, Ph.D., 1983, Washington State, Professor Geology. Fields: soil chemistry, soil physics, geochemistry.
- * **Duke, Dennis**, Ph.D., 1974, Iowa State, Professor Computational Science. Fields: High Performance Computing and Networking, Computational Ancient Astronomy; Nonlinear Time Series and Financial Mathematics; Chaos in the Human Brain, Nonlinear Dynamics in Physics; Algorithms for Scientific Computation; Computational Physics; Computational Science; Theoretical High Energy Physics.
- * **Dumm, Randy E.**, Ph.D., 1998, Georgia; Associate Professor of Risk Management/Insurance, College of Business. Field: Insurance.
- * **Dunn, Julia K.**, Ph.D., 1987, Illinois; Associate Professor of Human Services and Studies. Fields: Leisure Services and Studies.
- + **Dunnigan, David P.**, M.M., 1987, Northwestern; Professor, School of Music. Fields: Music Education, Bands.
- + **Dusenbury, Richard B.**, Ph.D., 1989, Wisconsin at Madison; Associate Professor of Accounting. Fields: Taxation, Behavioral Accounting Research.
- * **Dutton, Gareth**, Ph.D., 2005, Louisiana State, Assistant Professor, Psychology. Fields: Prevention and treatment of obesity.
- + **Eastman, Kevin L.**, Ph.D., 1992, Pennsylvania; Professor of Risk Management/Insurance, Real Estate and Business Law. Fields: Risk and Insurance.
- + **Easton, Peter A.**, Ph.D., 1988, Florida State; Associate Professor of Educational Leadership and Policy Studies. Fields: Comparative Adult Education, Human Resource Economics, Evaluation and Planning Methodology, Community Education and Cooperatives; Africa and the Caribbean.
- * **Ebbes, Paul D.**, M.M., 1971, Northwestern University; Associate Professor of Music. Fields: Tuba Performance, Euphonium Performance, Brass Literature.
- + **Ebener, Deborah J.**, Ph.D., 1989, Wisconsin; Associate Professor of Human Services and Studies. Fields: Rehabilitation Services, Counseling and Psychology, Human Systems.
- + **Eberstein, Isaac Warren**, Ph.D., 1979, Texas; Charles Meade Grigg Professor of Sociology, 2001, Chair of Sociology, and Research Associate, Center for the Study of Population. Fields: Mortality, Social/Ethnic Demography, Urban Systems, Metropolitan Change, Ecology, Minorities.
- + **Eccles, David W.**, Ph.D., 2001, Wales; Assistant Professor and Associate Program Director, Program Development/Faculty Support, Learning Systems Institute. Fields: Sport Psychology.
- + **Eckel, Lisa A.**, Ph.D., 1996, Western Ontario; Assistant Professor of Psychology. Fields: Physiological and Neural Control of Ingestive Behavior, Eating Disorders and Obesity.
- + **Edwards, Barbara J.**, Ed.D., 1989, Kentucky; Associate Professor of Special Education. Fields: Special Education Technology, the Mildly Handicapped.
- + **Edwards, Leigh H.**, Ph.D., 1999, Pennsylvania; Assistant Professor of English. Fields: 19th Century U.S. Literature and Culture, American Studies and Cultural Studies, Critical Theories of Race and Gender, Popular Culture.
- + **Efimov, Nina**, Ph.D., 1991, Florida State; Associate Professor of Modern Languages and Linguistics. Fields: Nineteenth- and Twentieth-century Russian Literature, Emigre Literature.
- * **Eginton, Margaret L.**, M.F.A, Assistant in Actor Training, Theatre. Field: Movement.
- * **Ehrlich, Sean**, Ph.D., 2004, Michigan, Assistant Professor, Political Science. Fields: International Relations.
- * **Ehrlinger, Joyce**, Ph.D., 2004, Cornell, Assistant Professor Psychology. Fields: Processes that underlie judgments about the self and one's environment.
- + **Eklund, Robert C.**, Ph.D., 1991, North Carolina; Professor, Educational Psychology and Learning Systems, College of Education. Fields: Sport and Exercise Psychology, Athlete Burnout, Psychological Aspects of Optimal Performance, Self-concept and Self-presentative in Exercise and Sport.
- + **El-Azab, Anter**, Ph.D., 1994, UCLA, Associate Professor, Mechanical Engineering. Fields: Multiscale modeling in mechanics and materials, structure and stability of nanoscale materials, statistical dislocation dynamics and mesoscale deformation, role of alloy microchemistry in deformation, and structural defects in ceramics.
- + **Ellingson, Robert G.**, Ph.D., 1972, Florida State; Professor and Chair of Meteorology. Fields: Physical Meteorology-Thermodynamics, Cloud Physics, Radiative Transfer.
- + **Ellington, W. Ross**, Ph.D., 1976, Rhode Island; Michael J. Greenberg Professor of Biological Science, 2001, and Director, Institute of Molecular Biophysics. Fields: Comparative Physiology and Biochemistry.

- + **Elsner, James Brian**, Ph.D., 1988, Wisconsin at Milwaukee; Professor of Geography. Fields: Synoptic Meteorology, Nonlinear Dynamics, Predictability and Chaos.
- + **Epstein, Andrew D.**, Ph.D., 2000, Columbia; Assistant Professor of English. Fields: 20th Century American Literature especially post-1945, Modern and Contemporary Poetry and Poetics, Modernism/Postmodernism, the Avant-Garde.
- + **Epstein, Lloyd M.**, Ph.D., 1983, Indiana; Associate Professor of Biological Science. Fields: Eukaryotic Molecular Genetics, Autocatalytic Processing of RNA, Genome Organization and Evolution, Environmental Modulated Gene Expression.
- + **Erickson, Gregory M.**, Ph.D., 1997, California at Berkeley; Assistant Professor of Biological Science. Field: Evolutionary Morphology.
- + **Ericsson, Karl A.**, Ph.D., 1976, University of Stockholm; FSCW/Kingsbury Eminent Scholar in Honor and Memory of Dr. Edward Conradi and Professor of Psychology. Fields: Cognitive and Behavioral Science, Structure and Acquisition of Memory Skills, Expert Performance and Expertise, Study of Cognitive Processes Using Think-aloud Protocols and Retrospective Verbal Reports.
- + **Erlbacher, Gordon**, Ph.D., 1983, Columbia; Professor of Mathematics. Fields: Numerical Analysis, Scientific Visualization.
- + **Erdl, Kathleen M.**, Ph.D., 1987, Wisconsin; Associate Professor of Religion. Fields: Modern Hinduism, Hindu Goddess Traditions and Womens Roles, Theory and Method in the Study of Religion, Women and Religion.
- + **Eugenio, Paul M.**, Ph.D., 1998, Massachusetts; Assistant Professor of Physics. Field: Experimental Nuclear Particle Physics.
- * **Evans, Curtis**, Ph.D., 2005, Harvard, Assistant Professor, Religion. Fields: Interpretations of and the Cultural Meaning of Black Religion; Intersection of Race and Religion in US History; Churches and Social Reform.
- * **Eveland, Vicki**, Ph.D., 1988, Mississippi State, Professor, Communication. Fields: Marketing communication, advertising strategies and campaigns, not-for-profit agencies, health communication.
- + **Everhart, Nancy**, Ph.D., 1990, FSU, Associate Professor, Library & Information Studies. Fields: School Media.
- + **Ewald, Brian David**, Ph.D., 2002, Indiana University, Assistant Professor, Mathematics. Fields: Stochastic Equations, Partial Differential Equations, Numerical Analysis, Fluid Mechanics.
- + **Fadool, Debra Ann**, Ph.D., 1993, Florida; Visiting Assistant Professor of Biological Science. Fields: Olfaction Signal Transduction, Ion Channel Structure/Function, Neuromodulation.
- + **Fadool, James M.**, Ph.D., 1992, Michigan State; Visiting Assistant Professor of Biological Science. Fields: Developmental Biology, Cellular and Genetic Analysis of Visual System Development.
- + **Fagherazzi, Sergio**, Ph.D., 1999, Padova; Assistant Professor of Geological Sciences, College of Arts and Sciences. Field: Surface Processes.
- + **Fajer, Piotr G.**, Ph.D., 1983, University of Leeds; Professor of Biological Science. Field: Biophysics of Muscle Contraction.
- + **Falk, Dean**, Ph.D., 1977, Michigan; Chair and Professor of Anthropology. Fields: Primate and Human Brain Evolution, Neuroanatomy, Osteology.
- * **Faria, Sandra H.**, D.S.N. 1989, Alabama at Birmingham; Associate Professor, School of Nursing. Fields: Gerontology, Caregiver Needs, Qualitative Research.
- * **Farrell, Suzanne**, Cincinatti College Conserv., Eppes Professor, Dance. Fields: Ballet.
- + **Faulk, Barry**, Ph.D., 1994, Illinois; Associate Professor of English. Field: Victorian Literature.
- + **Feiock, Richard C.**, Ph.D., 1986, Kansas; Professor of Public Administration and Policy. Fields: State and Local Administration, Business and Public Policy, Policy Evaluation.
- + **Fenley, Marcia O.**, Ph.D., 1991, Rutgers, Assistant Professor, Physics. Fields: Physical Chemistry; Molecular Dynamics; Electrostatic Computation in Molecular and DNA dynamics.
- + **Fenley, Sergio R.**, Ph.D., 1989, Princeton; Professor of Mathematics, College of Arts and Sciences. Fields: Geometric Topology, Dynamical Systems.
- + **Fennema, Martin G.**, Ph.D., 1992, Illinois; Associate Professor and Chair of Accounting. Field: Decision Making.
- + **Fenstermaker, John J.**, Ph.D., 1973, Ohio State; Distinguished Teaching Professor, 2000-2001, Distinguished Research Professor, 2001-2002, Fred L. Standley Professor of English, 2002. Fields: Victorian Literature, Rhetorical Theory and Composition Studies.
- + **Fenton, Kevin A.**, Ph.D., 1994, Florida State; Professor, School of Music. Field: Choral.
- + **Fernandez, Maria L.**, Ph.D., 1995, Georgia; Assistant Professor of Middle and Secondary Education. Fields: Mathematics Education, Middle and Secondary Teacher Education, Technology in Teaching Mathematics.
- + **Fernandez, Roberto G.**, Ph.D., 1977, Florida State; Dorothy Lois Breen Hoffman Professor of Modern Languages and Linguistics, 2001. Fields: Latin American Literature and Creative Writing.
- + **Ferris, Gerald R.**, Ph.D., 1982, Illinois at Urbana-Champaign; Francis Eppes Professor of Management. Fields: Human Resources Management and Organizational Behavior.
- + **Figley, Charles R.**, Ph.D., 1974, Pennsylvania State; Professor of Social Work. Fields: Family Therapy, Traumatic Stress, Crisis Intervention, Clinical Supervision/Training.
- + **Figueroa Galvez, Arturo**, Ph.D., 1999, Arizona; Assistant Professor of Nutrition, Food, and Exercise Sciences. Fields: The acute and chronic effects of exercise on cardiac autonomic control in obesity, type 2 diabetes and cardiovascular diseases.
- + **Fincham, Francis**, Ph.D., 1980, Oxford; Professor, Eminent Scholar Chair, and Director of Family and Child Sciences. Fields: Personal relationships: marriage/partnerships, particularly cognitive processes involved in conflict; the impact of interparental conflict/divorce on children; forgiveness in families; .
- + **Fiorito, Jack T.**, Ph.D., 1980, Illinois; J. Frank Dame Professor of Management, 1999. Fields: Human Resource Management, Industrial Relations, Unions, Labor Markets.
- + **Fiorito, Susan S.**, Ph.D., 1984, Oklahoma State; Associate Professor of Textiles and Consumer Sciences. Fields: Apparel Retail Technologies and Merchandising.
- + **Fischer, Thomas M.**, Ph.D., 1991, Univ. of Mainz, Associate Professor, Chemistry. Fields: soft matter, nano-dynamics, colloids.
- + **Fisher, Douglas L.**, M.M., 1981, Florida State University, Professor, School of Music. Fields: Opera Coaching/Accompanying.
- * **Fiske, Angela G.**, Ph.D., 2006, Univ. of Georgia, Assistant Professor Elementary Education. Fields: Social Studies Education, Psychosocial Adjustment of Young Adolescents, Academic Failure and Grade Retention.
- + **Flake, Janice L.**, Ph.D., 1973, Illinois; Professor of Elementary and Early Childhood Education and Practice. Fields: Mathematics Education, Computer Education, Computers in Mathematics Education, Computer Graphics, Computer Simulation, Integrating Computers into Curriculum, Visualization and Imagery Development, Teacher Education.
- + **Fleckenstein, Kristie S.**, Ph.D., 1989, Illinois State University, Associate Professor, English.
- + **Fleming, Marie**, Ph.D., 1976, University of London, Professor of Philosophy.
- + **Fleming, Raymond R.**, Ph.D., 1976, Harvard; Professor of Modern Languages and Linguistics. Fields: Italian Trecento, European Romanticism, African American Studies.
- + **Flores, Tatiana E.**, Ph.D., 2003, Columbia; Assistant Professor of Art History, School of Visual Arts and Dance. Fields: Latin American Art, Contemporary Art, Critical Theory.
- + **Flynn, Lisa R.**, Ph.D., 1989, Alabama. Associate Professor of Marketing. Fields: Retail and Psychometrics.
- + **Foo, Simon**, Ph.D., 1988, South Carolina; Associate Professor of Electrical and Computer Engineering. Fields: VLSI CAD, Analog IC Design, Artificial Intelligence (especially Artificial Neural Systems), Database Systems, Parallel Processing.
- + **Foorman, Barbara R.**, Ph.D., 1977, California, Professor, Reading, Elementary & Special Education. Fields: Reading and Language Development and Disabilities, School Effectiveness, Early Literacy Assessment.
- * **Ford-Kronholz, Barbara J.**, M.M., 1971, University of Michigan; Associate Professor of Music. Field: Vocal Performance.
- + **Fortenberry, Norman L.**, Sg.D., Massachusetts Institute of Technology; Associate Director and Assistant Professor of Mechanical Engineering. Fields: Applied Mechanics and Design, Materials.
- + **Foull, David F.**, Ed.D., 1978, Tennessee; Chair and Professor, Department of Middle and Secondary Education. Fields: Health Behaviors of At-Risk Youth, HIV/AIDS Prevention Among Migrant Farm-Workers.
- + **Fournier, Gary M.**, Ph.D., 1981, Virginia; Professor of Economics. Fields: Industrial Organization, Regulation.
- + **Fowler, Douglas R.**, Ph.D., 1972, Cornell; Professor of English. Fields: Twentieth-Century British and American Literature.
- * **Frank, Deborah I.**, Ph.D., 1982, Florida State; Professor of Nursing. Fields: Psych/Mental Health Nursing, Marriage and Family Therapy, Sex Therapy and Education.
- + **Frank, Michael P.**, Ph.D., 1999, Massachusetts Institute of Technology; Assistant Professor of Electrical and Computer Engineering. Fields: Fundamental physics of computing, reversible and quantum computing, modeling of nanoelectronic devices, and parallel and distributed computing.
- + **Fredrickson, William E.**, Ph.D., 1992, FSU, Professor Music Education. Fields: Music Education, Administration.
- + **Freeman, Marc Edward**, Ph.D., 1970, West Virginia; Lloyd M. Beidler Professor of Biological Science, 2000, Distinguished Research Professor, 1994-1995. Field: Reproductive Endocrinology.
- + **Freiberg, Jack W.**, Ph.D., 1988, Institute of Fine Art-New York University; Associate Dean, School of Visual Arts and Dance. Field: Italian Renaissance.
- + **Friedman, Max P.**, Ph.D., 2000, California at Berkeley; Visiting Assistant Professor of History. Field: U.S. Foreign Relations.
- + **Froelich, Philip N., Jr.**, Ph.D., 1979, Rhode Island; Professor of Oceanography, College of Arts and Sciences. Fields: Marine Geochemistry, Paleoceanography, Paleoclimatology, Global Biogeochemical Dynamics.
- + **Fuelberg, Henry E.**, Ph.D., 1976, Texas A&M; Professor of Meteorology. Fields: Synoptic and Mesometeorology, Remote Sensing.
- + **Fulkerson, Laurel**, Ph.D., 2000, Columbia; Assistant Professor of Classics. Fields: Latin & Greek poetry, gender theory.
- + **Fulton, Robert L.**, Ph.D., 1964, Harvard; Professor of Chemistry and Biochemistry. Fields: Theories of Linear and Nonlinear Dielectric Properties and Their Relation to Molecular Motion, Theories of Solvent Effects on Spectral Properties, Theories of Relaxation.
- + **Gaber, Brian D.**, M.M., 1986, Eastman School of Music; Associate Professor, School of Music. Fields: Contemporary Media.
- + **Gaffney, Betty Jean**, Ph.D., 1996, Stanford; Professor of Biological Science. Fields: Lipid Oxidation, Metalloenzymes, Magnetic Resonance.
- * **Gainsford, Read**, D.M., 2004, Indiana University, Associate Professor, Music Performance. Fields: Piano Performance.
- + **Galeano, Juan C.**, Ph.D., 1991, Kentucky; Associate Professor of Modern Languages and Linguistics. Fields: Contemporary Latin American Poetry and Politics, Latino Poetry in the United States, and Amazonian Culture.

- * **Gallagher, Kevin P.**, Ph.D., 2002, Case Western Reserve University; Assistant Professor of Management Information Systems. Fields: Management of Information Systems, Evolution of Information Systems, Management of Knowledge and Organizational Learning and System Analysis, Design and Implementation.
- + **Gallard, Alejandro J.**, Ph.D., 1989, Michigan State; Associate Professor of Middle and Secondary Education. Field: Science Education.
- Galle, Brian D.**, J.D., 2001, Columbia; LL.M., 2006, Georgetown; Assistant Professor of Law. Fields: Federal Income Taxation, Tax Policy, Taxation of Business Entities.
- + **Gallivan, Kyle A.**, Ph.D., 1983, Illinois; Professor of Computer Science. Fields: Numerical Algorithms, High-performance Computing, Signal and Image Processing Dynamical Systems.
- * **Garcia-Roig, Lilian**, M.F.A., Associate Professor of Art. Fields: Painting and Drawing.
- + **Gardner, Joann**, Ph.D., 1983, Johns Hopkins; Associate Professor of English. Fields: Victorian, Modern British and Irish, Creative Writing.
- + **Garretson, Peter P.**, Ph.D., 1974, London; Associate Professor of History. Fields: Middle East, North Africa.
- + **Garriga, Carlos**, Ph.D., 1999, Barcelona; Assistant Professor of Economics. Fields: Macroeconomics, Public Finance, Financial Economics.
- Garvin, Larry T.**, J.D., 1991, Yale; Associate Professor of Law. Fields: Contracts, Commercial Law, Law and Economics, Law and Psychology, Legal History.
- + **Gaston-Gayles, Joy E.**, Ph.D., 2002 Ohio State; Assistant Professor, Educational Leadership and Policy Studies, College of Education. Fields: Intercollegiate Athletics & Higher Ed.; Grad Student Socialization into faculty role.
- + **Gathegi, John N.**, J.D., California at Berkeley Associate Professor of Information Studies. Fields: Information Technology and the Law, Intellectual Property Rights.
- + **Gatzlaff, Dean H.**, Ph.D., 1990, Florida; Associate Professor and Chair of Risk Management/Insurance, Real Estate and Business Law. Fields: Real Estate Valuation, Real Estate Investments.
- * **Gelabert, Kate W.**, M.F.A., Associate Professor of Theatre. Field: Dance.
- + **Gellately, Robert J.**, Ph.D., 1974, London; Earl Ray Beck Professor of History, College of Arts and Sciences. Fields: European History, Terrorism & Genocide.
- + **Georgan, Jennifer**, Ph.D., 2001, MIT, Assistant Professor Geology. Fields: Geophysics.
- + **George, Alan D.**, Ph.D., Florida State; Associate Professor of Electrical and Computer Engineering. Fields: Specialized Computer Architectures and Systems including Parallel Computing, Fault-Tolerant Computing, and Networks.
- + **George, Joey F.**, Ph.D., 1986, California at Irvine; Thomas L. Williams Jr., Eminent Scholar in Information and Management Systems. Fields: Technology enabled group work and deception in computer-mediated communication.
- + **Gerard, Gregory J.**, Ph.D., 1998, Michigan State; Assistant Professor of Accounting. Field: Accounting Information Systems.
- + **Gerber, Larry J.**, M.M. Professor of Music. Fields: Voice Performance, Voice Literature.
- + **Gerend, Mary Ann**, Ph.D., 2003, Arizona State University, Visiting Assistant Professor, Psychology. Fields: Women's health.
- + **Geringer, John M.**, Ph.D., 1976, Florida State; Lewis V. Panbaskie Professor of Music, 2001, and Director, Center for Music Research. Fields: Music Education.
- * **Gershstein, Yuri**, Ph.D., 1996, Institute Theoretical & Experimental Physics, Assistant Professor Physics. Fields: hunt for the Higgs boson and physics beyond the Standard Model, in particular for the Supersymmetry.
- + **Gerson, Paula Lieber**, Ph.D., 1970, Columbia; Chair and Professor of Art History.
- + **Gert, Joshua N.**, Ph.D., 1998, Illinois at Chicago; Assistant Professor of Philosophy, College of Arts and Sciences. Fields: Ethics, Value Theory, Practical Reason.
- + **Gertz, Marc G.**, Ph.D., 1976, Connecticut; Professor of Criminology and Criminal Justice. Fields: Public Law/Judicial Process and Behavior, Administration of Criminal Justice, Public Policy in the Criminal Justice System.
- Gey, Steven G.**, J.D., 1982, Columbia; David and Deborah Fonvielle and Donald and Janet Hinkle Professor of Law. Fields: Church and State, Civil Rights Survey, Con Law, First Amendment, Habeas Corpus, Injunctions, Public Interest Law.
- + **Gilbert, David M.**, Ph.D., 1989, Stanford, Professor, Biological Science. Fields: Specification of mammalian replication origins; Mapping replication origins in human ES cells; Nuclear organization and stem cell commitment.
- + **Gilmer, Penny J.**, Ph.D., 1972, California at Berkeley; Professor of Chemistry and Biochemistry. Fields: Biochemistry, Immunochemistry, Biochemical Nature of Cell-cell Recognition, Lysosomal Processing, Biodegradation of Toxic Wastes.
- + **Giunipero, Larry C.**, Ph.D., 1980, Michigan State; Professor of Marketing. Field: Purchasing and Materials.
- + **Glendenning, Karen K.**, Ph.D., 1971, Ohio State; Professor of Psychology. Fields: Neuroanatomy and Neuropsychology, especially Pathways and Neurotransmitters in the Brain for Sound Localization, Evolution of Sensory Systems in the Brain, Neuropsychological Disorders.
- * **Glenn, Timothy D.**, M.F.A., Assistant Professor of Dance. Fields: Choreography Dance and Technology.
- + **Glueckauf, Robert L.**, Ph.D., 1981, Florida State; Professor of Medical Humanities and Social Sciences, College of Medicine. Field: Efficacy and Cost Utility of Alternative Health Delivery Systems and Behavioral Science.
- + **Goff, C. Bryan**, M.M. Professor of Music. Fields: Trumpet Performance, Brass Literature.
- + **Goff, Matthew**, Ph.D., 2002, University of Chicago, Assistant Professor, Religion. Fields: Wisdom Literature; Apocalypticism; The Dead Sea Scrolls; Second Temple Judaism.
- * **Golder, Matt**, Ph.D., 2005, NYU, Assistant Professor, Political Science. Fields: Comparative Politics and Methodology.
- * **Golder, Sonja**, Ph.D., 2004, NYU, Assistant Professor, Political Science. Fields: Comparative Politics and Methodology.
- + **Goldsbey, Kenneth A.**, Ph.D., 1983, North Carolina at Chapel Hill; Associate Professor and Associate Chair, Chemistry and Biochemistry, College of Arts and Sciences. Fields: Directed Electron Transfer and Intervalence Transfer in Mixed-Valence Complexes, Chemically Coupled Electron Transfer Reactions, Electrochemistry.
- + **Goldsmith, Elizabeth B.**, Ph.D., 1977, Michigan State; Professor of Textiles and Consumer Sciences. Fields: Women/Fatigue, Work and Family, Consumer Economics, Family Resource Management.
- + **Goldsmith, Ronald E.**, Ph.D., 1983, Alabama; Richard M. Baker Professor of Marketing, 2001. Fields: Survey Research, Consumer Behavior, Value Systems.
- + **Goldstein, Howard**, Ph.D., 1980, Vanderbilt; Professor of Communication Disorders. Fields: Communication and Social Development, Language Intervention, and Development Disabilities.
- + **Gomariz, Jose**, Ph.D., 1997, Illinois; Assistant Professor of Modern Languages and Linguistics. Fields: Nineteenth Century Hispanic Literatures and Cultures, Caribbean Studies, Jose Marti, Modernism, the African Diaspora in the Americas, Mexican Literature and Culture, Postcolonial Theory.
- + **Gomoroy, Tomi**, Ph.D., 1998, California at Berkeley; Associate Professor of Social Work. Fields: Philosophy of Science, Social Policy and Research, Mental Health, and Political Economy of Psychiatry and Social Work, Critical Rationalism, Homelessness, Social Work Methods.
- + **Goncharov, Yevgeny**, Ph.D., 2003, University of Illinois -Chicago, Assistant Professor, Mathematics.
- + **Gontarski, Stanley E.**, Ph.D., 1974, Ohio State; Sarah Herndon Professor of English, 1999, Distinguished Research Professor, 1999-2000. Fields: Twentieth-Century British, American, and European Literature.
- + **Goodman, Robin T.**, Ph.D., 1997, New York University; Assistant Professor of English. Fields: Postcolonial Literature and Theory, Feminism, Literatures of the Americas, Cultural Studies.
- * **Graham, Pamela W.**, M.S.W. Director of the Masters of Social Work Program and Associate Professor of Social Work. Fields: Family and Social Work, Child Welfare and Health Care.
- + **Grant, Jonathan A.**, Ph.D., 1995, Wisconsin at Madison; Associate Professor of History. Fields: Imperial Russia, Soviet Union, Central Asia, World History, Economics and Business History.
- * **Grant, Samuel**, Ph.D., 2001, University of Illinois, Assistant Professor, Chemical & Biomedical Engineering. Fields: Magnetic resonance microscopy and spectroscopy, single cell analysis, compartmental diffusion and exchange in cells and bioengineered constructs, radio frequency MRI coils, neurodegenerative disease (ALS, Alzheimer's Disease), high field MRI contrast mechanisms and agents.
- + **Gray, Edward G.**, Ph.D., 1996, Brown; Associate Professor of History, College of Arts and Sciences. Field: Early American (Colonial).
- + **Greek, Cecil E.**, Ph.D., 1983, New School for Social Research; Associate Professor of Criminology and Criminal Justice. Fields: Criminological Theory, Crime and Media, Juvenile Delinquency, Distance Learning.
- + **Green, Elna C.**, Ph.D., 1992, Tulane; Professor and Associate Chair and of History. Fields: New South, Women, Social Welfare.
- + **Greenbaum, Nancy L.**, Ph.D., 1984, Pennsylvania; Associate Professor of Chemistry and Biochemistry. Fields: Structural Biology of Pre-mRNA Splicing, RNA-RNA, RNA-Protein, RNA-Metal Ion Complexes Probed by Solution NMR and Other Spectroscopic Techniques.
- * **Gregory, S. Dianne**, M.M. 1969, Florida State; Associate Professor of Music. Field: Music Therapy.
- Griffith, Elwin J.**, J.D., 1963, Brooklyn Law School; LL.M., 1964, New York University; Tallahassee Alumni Professor of Law. Fields: Commercial Paper, Consumer Law, Immigration Law, Law and Psychiatry.
- + **Grindal, Bruce T.**, Ph.D., 1969, Indiana; Professor of Anthropology. Fields: Education, Religion, Humanism, Peace Studies, Literary Ethnography, West Africa, American South, Mexico.
- * **Groeniger, Scott D.**, M.F.A., Assistant Professor of Art. Fields: Digital Media Arts and Design.
- + **Gross, Melissa R.**, Ph.D. 1998, California at Los Angeles; Associate Professor of Information Studies. Fields: Imposed and Shared Information Seeking Behavior, Information Program and Service Design and Evaluation, and the Provision of Information to Children.
- * **Grubbs, Laurie M.**, Ph.D., 1991, Florida; Professor of Nursing. Field: Health Promotion as it relates to Exercise, Nutrition and Obesity.
- + **Gunderson, Frank**, Ph.D., 1999, Wesleyan; Assistant Professor, School of Music. Fields: Ethnomusicology.
- + **Gunjan, Akash**, Ph.D., 2000, Univ. of Mississippi, Assistant Professor Biomedical Sciences. Fields: Biochemistry, Genetics.
- + **Gunzburger, Max D.**, Ph.D., 1969, New York University; Francis Eppes Professor of Mathematics. Fields: Applied and Computational Mathematics.
- + **Gussak, David E.**, Ph.D., 2001, Emporia State; Visiting Assistant Professor of Art Education. Field: Art Therapy.
- + **Gutierrez, Robert**, Ed.D., 1998, Florida International; Assistant Professor of Elementary and Early Childhood Education and Practice. Fields: Civic Education, Values Education, Multiculturalism.
- + **Guy, Mary E.**, Ph.D., 1981, South Carolina; Professor of Public Administration and Policy and Jerry Collins Eminent Scholar in Public Administration. Fields: Human Resources Management, Health Policy, Organizational Theory.
- + **Hadden, Sally E.**, Ph.D., 1993, Harvard; Associate Professor of History. Fields: Old South and American Legal History.

- + **Hagopian, Vasken**, Ph.D., 1963, Pennsylvania; Joseph E. Lannutti Professor of Physics, 1999, and Distinguished Research Professor, 1997-1998. Fields: Experimental Physics, Elementary Particle Physics.
- + **Hahn, Cynthia J.**, Ph.D., 1982, Johns Hopkins; Gulnar K. Bosch Professor of Art History, 2000. Fields: Medieval and Islamic Art.
- * **Hale, Debra L.**, M.F.A., Assistant Professor of Theatre. Fields: Voice and Performance.
- * **Hall, Angela T.**, Ph.D., 2005, FSU, Assistant Professor, Business Administration. Fields: Human Resources Management/Organizational Behavior Minor Field: Strategic Management.
- * **Hall, Millard W.**, Ph.D., 1984, Vanderbilt University of Illinois; Professor of Civil and Environmental Engineering. Fields: Water Quality, Water Resources Policy, Environmental Engineering, Hazardous Waste Management.
- + **Hanline, Mary**, Ph.D., 1989, California at Berkeley; Associate Professor and Chair of Special Education. Fields: Early Childhood Special Education and Intervention.
- + **Hansen, Thomas F.**, Ph.D., 1997, University of Oslo; Assistant Professor of Biology. Fields: Theoretical Evolutionary Biology.
- * **Hanson, Meegan Kennedy**, Ph.D., 2000, Brown University, Assistant Professor, English.
- + **Hargreaves, Alec G.**, Ph.D., 1978, Sussex; Ada Belle Winthrop-King Eminent Scholar in French and Professor of Modern Languages. Fields: Contemporary French and Francophone Studies.
- + **Harris, Douglas N.**, Ph.D., 2001, Michigan State; Assistant Professor of Educational Leadership and Policy Studies. Fields: Economics of education.
- + **Harris, James O.**, M.D., 1965, Mississippi; Professor and Dean, Clinical Sciences, College of Medicine Field: Pulmonary Medicine.
- + **Hart, Robert E.**, Ph.D., Pennsylvania State; Visiting Assistant Professor of Meteorology, College of Arts and Sciences. Fields: Tropical and Extratropical Cyclones, Synoptic Meteorology, Numerical Weather Prediction and Forecasting, Ensemble Methods and Visualization.
- + **Hartline, Michael D.**, Ph.D., 1993, Memphis; Associate Professor of Marketing, College of Business. Fields: Services Marketing, Customer Contact, Strategic Marketing.
- * **Hartwell, Janice E.**, M.F.A. Associate Professor of Studio Art. Field: Printmaking.
- + **Harvey, Bruce A.**, Ph.D., 1991, Georgia Institute of Technology; Associate Professor of Electrical and Computer Engineering. Fields: Wireless Communication, Data Communication.
- * **Haslem, Bruce**, Ph.D., 2004, Indiana, Assistant Professor, Business Administration. Fields: Corporate Finance, and Law Finance.
- + **Hasson, Deborah J.**, Ed.D., 2001, Florida International University; Assistant Professor of Middle and Secondary Education. Fields: Teacher Education and English Language Learners, Bilingual Education and Second Language Acquisition, Native Language Maintenance in Bilinguals, Curricular Models in Second Language Teacher Education, Family Literacy.
- + **Hawkes, Lois W.**, Ph.D., 1977, London; Professor of Computer Science. Fields: Fault Tolerance, Coding Theory, Intelligent Tutoring Systems.
- + **Hay, Carter H.**, Ph.D., 1999, Texas; Visiting Assistant Professor of Criminology. Fields: criminological theory, and family- and community-related causes of crime and delinquency.
- + **Haymes, Emily M.**, Ph.D., 1973, Pennsylvania State; C. Etta Walters Professor of Exercise Science, 2000, Professor of Nutrition, Food and Exercise Sciences. Fields: Nutrition and Performance, Environmental Effects on Exercise.
- + **Heald, Gary R.**, Ph.D., 1977, Michigan State; Theodore Clevenger, Jr. Professor of Communication, 2001, and Associate Dean of Communication. Fields: Marketing Communication and Information Systems, Development Communication, Research Methods.
- + **Heflin, Frank**, Ph.D., 1992, Purdue, Associate Professor, Business Administration. Fields: Financial reporting regulations, transactions costs in stock markets, and the determinants and consequences of managers' reporting choices.
- + **Heil, Wolfgang H.**, Ph.D., 1970, Rice; Professor of Mathematics. Fields: Topology of 3-manifolds, Combinatorial Group Theory.
- + **Heiland, Frank W.**, Ph.D., 2002, State University of New York; Visiting Assistant Professor of Economics. Fields: Labor economics, demographic economics.
- + **Heitmeyer, Jeanne D.**, Ph.D., 1985, Florida State; Associate Professor of Textiles and Consumer Sciences. Fields: Merchandising, Social/Psychological Aspects of Clothing and Textiles.
- + **Hellweg, Joseph R.**, Ph.D., 2001, Virginia; Visiting Assistant Professor of Anthropology, College of Arts and Sciences. Fields: Religion, Islam, Christianity, Sacrifice; Performance Aesthetics, Ethnopoetics.
- + **Hensel, Paul R.**, Ph.D., 1995, Illinois; Associate Professor of Political Science. Fields: International Relations, Conflict.
- + **Herrera, Robinson A.**, Ph.D., 1997, California-Los Angeles; Associate Professor of History, Field: Latin America.
- + **Herrnkind, William Frank**, Ph.D., 1968, Miami; Robert K. Godfrey Professor of Biological Science, 2000. Field: Behavior and Migration of Marine Animals.
- + **Hilinski, Edwin F.**, Ph.D., 1982, Yale; Associate Professor of Chemistry and Biochemistry. Fields: Mechanistic Studies of Photochemical and Thermal Reactions of Organic Compounds in Solution, Picosecond Laser Spectroscopy.
- + **Hillison, William A.**, Ph.D., 1977, Florida; Professor of Accounting. Fields: Auditing Theory and Application, Accounting Information Systems.
- + **Hilton, May Chan**, Ph.D. 2000 Virginia Assistant Professor, Civil Engineering. Fields: Optimization of groundwater; management and remediation systems; groundwater flow and contaminant transport modeling; evolutionary computation and artificial intelligence; environmental systems analysis; contaminant hydrogeology; environmental fluid mechanics; traffic noise modeling.
- + **Hinterlong, James E.**, Ph.D., 2002, Washington University; Assistant Professor of Social Work. Fields: Gerontology, Productive Engagement in Later Life, Social Policy Analysis, Civic Engagement, Community Development, Technology of Social Work Teaching and Research.
- + **Hironaka, Eriko**, Ph.D., 1990, Brown; Associate Professor of Mathematics. Fields: Algebraic Geometry, Law-dimensional Topology.
- + **Hirsch, Adam J.**, J.D., 1982, Yale; Ph.D., 1987, Yale; William and Catherine VanDercreek Professor of Law. Fields: Gratuitous Transfers, Estate Planning, Creditors Rights, Legal History.
- + **Hirst, Linda S.**, Ph.D., 2001, University of Manchester (UK), Assistant Professor, Physics. Fields: Experimental Physics: soft condensed matter with interests in both biophysics and liquid crystal materials; molecular self-assembly in biological and soft-matter systems.
- + **Hochwarter, Wayne A.**, Ph.D., 1993, Florida State; Associate Professor of Management, College of Business. Fields: Social Influence in Organizations, Motivation, Workplace Cynicism, Job Stress and Measurement.
- * **Hodges, Anne R.**, D.M., 1992, Florida State; Program Director of Music. Field: Arts Administration.
- + **Hoekman, Timothy**, D.M.A., 1982, Michigan; Professor of Music. Fields: Accompanying, Vocal Coaching.
- + **Hofaker, Charles F.**, Ph.D., 1982, California at Los Angeles; Professor of Marketing. Fields: Mathematical Choice Models, Marketing Research, Pricing Decisions.
- + **Holcombe, Randall G.**, Ph.D., 1976, Virginia Polytechnic Institute and State University; Professor of Economics. Fields: Public Finance, Public Choice.
- + **Hollander, Myles**, Ph.D., 1965, Stanford; Chair and Professor of Statistics, Distinguished Research Professor 1995-1996, and Robert O. Lawton Distinguished Professor, 1998-1999. Fields: Nonparametric Statistics, Biostatistics, Reliability.
- + **Hollis, Patrick J.**, Ph.D., 1986, Cornell University. Associate Professor of Mechanical Engineering. Fields: Nonlinear Dynamics, Computer Aided Design, and Robotics.
- * **Holtfreter, Kristy L.**, Ph.D., 2004, Michigan State; Assistant Professor, School of Criminology and Criminal Justice. Fields: white-collar crime and fraud, organizations, gender and crime, and correctional programming.
- + **Holton, Robert A.**, Ph.D., 1971, Florida State; Matthew Suffness Professor of Chemistry and Biochemistry, 2000, Distinguished Research Professor, 1999-2000. Fields: Synthetic Organic, Organometallic, and Bioorganic Chemistry Total Synthesis of Natural Products.
- + **Holzman, Bruce**, D.M.A., Associate Professor of Music. Field: Guitar.
- * **Hook, Charles E.**, M.F.A., 1973, Washington University. Associate Professor of Studio Art. Field: Sculpture.
- + **Horabin, Jamila I.**, Ph.D., 1987, Duke Associate Professor, Biomedical Sciences. Fields: Developmental Biology.
- + **Horne, Ruby Lee**, Ph.D., 2001, University of Colorado-Boulder, Assistant Professor, Mathematics. Fields: Nonlinear Schrodinger equation; Nonlinear fiber optics systems; Nonlinear partial differential equations; Asymptotic and perturbation methods for solving linear and nonlinear differential equations; Randomness in optical fiber systems; Pairwise soliton pulse interactions and four-wave mixing.
- + **Horner, Mark W.**, Ph.D., 2002, Ohio State; Assistant Professor, Geography, College of Social Sciences. Fields: urban transportation, Geographical Information Systems.
- + **Houck, Davis W.**, Ph.D., 1995, Penn State; Associate Professor of Communication. Fields: Rhetorical Criticism and Theory, American Public Address, the Body and Culture.
- + **Houle, David C.**, Ph.D., 1988, State University of New York; Associate Professor of Biological Science, College of Arts and Sciences. Fields: Evolutionary Genetics, Sexual Selection, Mutation, Genotype/phenotype Map.
- + **Houpt, Thomas A.**, Ph.D., 1991, Harvard; Associate Professor of Biological Science, College of Arts and Sciences. Fields: The neurobiology of feeding, especially learned taste aversions, and the neural effects of magnetic fields.
- * **Hruda, Simone**, Ph.D., 1992, Massachusetts Institute of Technology; Associate Chair and Associate Professor, Mechanical Engineering. Fields: Ceramic Processing & Characterization, High Temperature Super-Conductors.
- + **Hsieh, Yun-Hwa P.**, Ph.D., 1987, Florida State; Visiting Professor of Nutrition, Food and Exercise Sciences. Fields: Antibody development and immunoassay, rapid detection for food quality and safety, functional food research.
- + **Hu, Shouping**, Ph.D., 2000, Indiana University; Associate Professor, Educational Leadership and Policy Studies, College of Education. Fields: Higher Ed. Policy, College Students, Research Methods.
- + **Huang, Wenrui**, Ph.D., 1993, Rhoda Island; Visiting Assistant Professor of Civil and Environmental Engineering. Fields: Hydraulics, Hydrology, Estuarine and Coastal Modeling and Engineering.
- + **Huckaba, Sam W.**, Ph.D., 1986, Purdue; Professor and Associate Chair of Mathematics. Fields: Commutative Algebra, Local Rings.
- + **Huettel, Markus H.**, Ph.D., 1988, Kiel; Visiting Professor of Oceanography, College of Arts and Sciences. Fields: Benthic Ecology, Biogeochemistry, Transport Mechanisms in Sediments, Effect of Boundary Layer Flows on Benthic Processes.
- + **Huffer, Frederick W.**, Ph.D., 1982, Stanford; Professor of Statistics. Fields: Geometrical Probability, Multivariate Analysis, Partial Orderings of Distributions, Inequalities for Tail Probabilities.
- + **Hull, Elaine**, Ph.D., 1967, Indiana, Professor, Psychology. Fields: Neuroendocrine control of male rat sexual behavior.
- + **Humayun, Munir**, Ph.D., 1994, Chicago, Associate Professor, Geological Sciences. Fields: Geochemistry, Cosmochemistry, Trace Element.
- + **Humphrey, David B.**, Ph.D., 1995, California-Berkeley; Professor of Finance and Fannie Wilson Smith Eminent Scholar in Banking. Fields: Banking, Managerial Economics.

- * **Humphrey, Stephen E.**, Ph.D., 2004, Michigan State; Assistant Professor, Management Information Systems, College of Business. Fields: Work Teams (Structure & Change), Work Design, Decision Making (Structure & Time), Negotiation.
- + **Hurdal, Monica**, Ph.D., 1998, Queensland University of Technology; Assistant Professor of Mathematics, College of Arts and Sciences. Fields: Biomedical Mathematics, Scientific Visualization, Applied Mathematics, Computational Mathematics.
- + **Hurt, Myra M.**, Ph.D., 1981, University of Tennessee Health Sciences Center; Professor, Biomedical Sciences. Field: Microbiology, Molecular Biology.
- + **Hussaini, Mohammed Yousuff**, Ph.D., 1970, California; Professor of Mathematics and Sir M. James Lighthill Eminent Scholar in Mathematics and Computational Science. Fields: Transition and Turbulence, Computational Combustion, Computational Acoustics and Electromagnetics, Numerical Analysis and Algorithm Development, Multidisciplinary Design Optimization, Parallel and Distributed Computing.
- * **Hutton, Irena**, Ph.D., 2006, CUNY, Assistant Professor Business Administration. Fields: Seasoned Equity Offerings, Equity Market Timing, Capital Structure Teaching: Investments, Corporate Finance, Financial Management, Financial Institutions.
- + **Hyson, Richard L.**, Ph.D., 1985, Colorado; Professor of Psychology, College of Arts and Sciences. Fields: Neural Development and Plasticity.
- + **Iatarola, Patrice M.**, Ph.D., 2002, New York; Assistant Professor of Educational Leadership and Policy Studies. Fields: Urban Ed. Policy, School of Finance, Resource Allocation Accountability.
- * **Icerman, Joe D.**, Ph.D., 1977, North Carolina at Chapel Hill; Associate Dean, College of Business, and Associate Professor of Accounting. Fields: Financial Accounting, Governmental Accounting.
- + **Icerman, Rhoda C.**, D.B.A., 1983, Florida State; Professor of Accounting. Fields: Governmental Accounting, Accounting Information Systems, Auditing Theory and Application.
- + **Ihlanfeldt, Keith R.**, Ph.D., 1978, Washington University at St. Louis; Professor of Economics and DeVoe L. Moore and Family Eminent Scholar for the Study of Critical Issues in Economic Policy and Government. Fields: Urban Economics, Local Public Finance, Applied Microeconomics.
- + **Ilich-Ernst, Jasminka**, Ph.D., 1994, University Zagreb, Professor, Food & Nutrition. Fields: Bone health and body composition, bioavailability of calcium, magnesium, and zinc.
- + **Imwold, Charles H.**, Ph.D., 1980, Pittsburgh; Chair and Professor of Sport Management, Recreation Management and Physical Education. Fields: Teacher Behavior, Skill Analysis, Curriculum.
- * **Inci, Ahmet C.**, Ph.D., 2001, Michigan at Ann Arbor; Visiting Assistant Professor of Finance. Fields: Investments, Asset Pricing, International Finance, Quantitative Analysis and Economics.
- + **Inouye, Brian D.**, Ph.D., 1998, Duke; Assistant Professor of Biological Science. Fields: Population and community ecology and tropical ecology.
- + **Irvin, Judith L.**, Ph.D., 1980, Florida State; Professor of Educational Leadership. Fields: Educational Administration and Teacher Education.
- + **Isaac, Robert M.**, Ph.D., 1981, California Institute of Technology; John and Hallie Quinn Eminent Scholar for Renewal of American Heritage and American Free Enterprise. Fields: Experimental economics, industrial organization.
- + **Iverson, Richard L.**, Ph.D., 1972, Oregon State; Program Director and Professor of Oceanography. Fields: Simulation Modeling of Marine Ecological Processes, Physiological Ecology of Marine Phytoplankton, Bioreactive Element Cycling in the Ocean, Ocean Color Image Applications, Seagrass Production Ecology.
- * **Jackson, C. Cameron**, MFA, 1994, Alabama, Associate Professor, Theatre. Fields: Theatre.
- * **Jackson, Carla W.**, Ph.D., 2005, Kansas, Assistant Professor, Communication Science & Disorders. Fields: Developmental Disabilities Augmentative and Alternative Communication Early Intervention, Deafness, & Developmental Communication.
- + **Jackson, Robert A.**, Ph.D., 1994, Indiana University; Associate Professor of Political Science. Fields: American Politics, Political Behavior.
- + **Jacobs, Joseph W., J.D.**, 1976, Yale; Professor of Law. Fields: Taxation, Corporate Tax, Banking Law.
- + **Jakubowski, Elizabeth Henderson**, Ed.D., 1988, Georgia; Associate Dean, College of Education, and Associate Professor of Middle and Secondary Education. Fields: Mathematics Education, Elementary/Middle School Mathematics, Teacher Education.
- + **James, Jeffrey D.**, Ph.D., 1997, Ohio State; Associate Professor, Sport Management, Recreation Management and Physical Education, College of Education. Fields: Sport Management, Consumer Loyalty, Branding Sport Products, Psychological Commitment.
- + **James, Patrick**, Ph.D., Maryland; Professor of Political Science. Field: International Relations.
- + **Jeong, Allan C.**, Ph.D., 2001, Wisconsin; Visiting Assistant Professor of Educational Research. Fields: Distance Learning, Collaborative Learning, Electronic Tools for Assessing Quality of Student Interaction in On-line Courses.
- * **Jiang, Danling**, Ph.D., 2006, Ohio State University, Assistant Professor Business Administration. Fields: Empirical and Theoretical Asset Pricing, Behavioral Finance, Individual Trading Behavior, Experimental Finance.
- + **Jimenez, Alexander E.**, D.M. 1999, Florida State; Assistant Professor of Music. Fields: Orchestra, Conducting, Percussion.
- + **Johnson, David F.**, Ph.D., 1993, Cornell; Associate Professor of English. Field: Medieval Studies.
- + **Johnson, James Franklyn**, Ph.D., 1989, California at Riverside; Associate Professor of Psychology. Fields: Development of Brain and Behavior, Regulation of Neuron Survival, Formation of Sex Differences in Neural Structure.
- + **Johnson, Suzanne B.**, Ph.D., 1974, State University of New York at Stony Brook; Professor and Chair of Medical Humanities and Social Sciences. Field: Behavioral Science.
- + **Joiner, Thomas E., Jr.**, Ph.D., 1993, Texas at Austin; Bright-Burton Professor of Psychology. Fields: Interpersonal and Cognitive Causes, Correlates, and Consequences of Depression, Bulimia Nervosa, and Anxiety Disorders, the Nature and Treatment of Suicidality.
- + **Jolles, Adam D.**, Ph.D., 2002, Chicago; Assistant Professor of Art History. Fields: 19th & 20th-Century European Art and History of Photography.
- + **Jones, Evan A.**, Ph.D., 2002, Rochester; Assistant Professor of Music Theory and Composition. Field: Music Theory.
- + **Jones, Ithel**, Ed.D., 1994, Georgia; Associate Professor, Dean's Office, College of Education. Fields: Early Childhood Education, Child Development.
- + **Jones, James P., Jr.**, Ph.D., 1960, Florida; Professor of History, Distinguished Teaching Professor, 1990-1991 Field: United States Civil War.
- + **Jones, Maxine D.**, Ph.D., 1982, Florida State; Professor of History. Fields: Nineteenth - Century United States, Black History.
- * **Jones, Stephen**, MFA, 1990, Texas-Austin, Assistant Professor, Studio Art. Fields: Sculpture.
- + **Jordan, Felecia F.**, Ed.D., 1989, West Virginia; Associate Professor of Communication. Fields: Interpersonal (Nonverbal, Gender) Communication, Instructional Communication.
- * **Jordan, Rodney B.**, B.A., Assistant Professor of Music. Fields: Music Education, Jazz Studies.
- * **Jordan, William F.**, Ph.D., 1974, Georgia State; Service Professor of Accounting, Professor Emeritus 2004. Fields: Federal Taxation, Accounting Information Systems, Financial Accounting, Managerial Accounting.
- * **Jordon, Dale**, B.F.A., Professor of Theater. Fields: Scenic Design, Lighting Design. Member: LATSE/United Artists #829, SD, LD.
- + **Jorgensen, Corinne L.**, Ph.D., 1995, Syracuse; Associate Professor of Information Studies. Fields: Image Description, Indexing and Retrieval, Human Cognitive and Perceptual Factors in the Design of Image-retrieval Systems.
- + **Jumonville, Neil T.**, Ph.D., 1987, Harvard; William Warren Rogers Professor of History, 1999, and Chair of History. Fields: American Intellectual History, American Historiography, and America since 1945.
- + **Kabbaj, Mohamed**, Ph.D., 1997, University Bordeaux II, France; Assistant Professor of Biomedical Sciences. Fields: Neuroscience.
- * **Kalbian, Aline V.**, Ph.D., 1996, Virginia; Assistant Professor of Religion. Fields: Religion and Ethics, Catholic Moral Theology, Gender Studies, Medical Ethics.
- + **Kalu, Eric E.**, Ph.D., 1991, Texas A&M; Assistant Professor of Chemical Engineering. Fields: Electrophysiological Process, Electrochemical Ethics.
- + **Kalu, Peter N.**, Ph.D., 1986, London; Associate Professor of Mechanical Engineering, College of Engineering. Fields: Microscopy, Texture and Microtexture, Micromechanism of Deformation and Fracture, Recrystallization.
- + **Kamata, Akihito**, Ph.D., 1998, Michigan State; Associate Professor of Educational Research. Fields: Educational Measurement, Psychometrics.
- * **Kaminsky, Stuart M.**, Ph.D., 1971, Northwestern; Professor of Motion Picture, Television, and Recording Arts, and Director, Graduate Film Conservatory. Fields: Screenwriting, Film History and Criticism, Directing, Genre Studies, Narrative Writing (Short Story and Novel).
- + **Kangas, David J.**, Ph.D., 1999, Yale; Assistant Professor of Religion. Fields: Philosophy of Religion, Religious Ethics in the Modern Period.
- * **Karioth, Sally J.**, Ph.D., 1977, Florida State; Associate Professor of Nursing. Fields: Family and Community Nursing, Grief Therapy.
- + **Kaschak, Michael P.**, Ph.D., 2003, Wisconsin at Madison; Visiting Assistant Professor of Psychology, College of Arts and Sciences. Fields: Language Processing and Comprehension.
- * **Kato, Yoichi**, Ph.D., M.D., 1997, Nagoya City University Medical School, Japan, Assistant Professor, Biomedical Science. Fields: Developmental Biology, Neuroscience.
- + **Kavka, Martin T.**, Ph.D., 2000, Rice; Assistant Professor of Religion. Fields: Modern European and American Jewish Thought, Post-Holocaust Thought, Postmodern Philosophy of Religion.
- + **Kazmer, Michelle M.**, Ph.D., 2002, Illinois at Urbana; Assistant Professor, School of Information Studies. Fields: Online communities, online learning, computer-mediated communication, distributed knowledge.
- + **Keesecker, Jeffrey S.**, M.M., Professor, School of Music. Fields: Woodwind Performance/Literature.
- + **Keith, Verna**, Ph.D., 1982, Kentucky, Professor Sociology. Fields: Mental Health, Health, Race-Ethnicity.
- + **Keller, John M.**, Ph.D., 1974, Indiana University; Professor of Educational Research. Fields: Motivation in Instructional Design, Project Management.
- + **Keller, Laura R.**, Ph.D., 1980, Virginia; Associate Professor of Biological Science. Fields: Molecular Genetics, Regulation of Gene Expression, Proteins Controlling Transcription.
- + **Keller, Thomas C.S., III**, Ph.D., 1981, Virginia; Associate Professor of Biological Science. Fields: Cell and Molecular Biology of the Cytoskeleton, Cytoskeletal Regulation and Energetics.
- + **Kelley, Colleen M.**, Ph.D., 1983, Stanford; Associate Professor of Psychology. Fields: Human Memory and Cognition; Aging and Memory, Judgement.
- + **Kelley, Elecia N.**, Ph.D., 2003, Harvard; Assistant Professor of Religion, College of Arts and Sciences.
- + **Kelly, F. Donald**, Ph.D., 1970, Florida; Associate Professor of Human Services and Studies. Fields: Personality Assessment, Family Therapy, Behavior Management in Home and School.
- + **Kelly, Steven N.**, Ph.D., 1993, Kansas; Associate Professor, School of Music. Field: Music Education.
- + **Kelsay, John E.**, Ph.D., 1985, Virginia; Richard L. Rubenstein Professor of Religion, 2000, and Chair of Religion. Fields: Ethics, Islamic Studies, Western Religious Thought.
- * **Kennedy, William L.**, M.M., Associate Professor of Music. Field: Jazz Studies.
- + **Kent, Robert Aubrey William**, Ph.D., 1999, Ohio State; Assistant Professor of Sport Management, Recreation Management and Physical Education. Field: Leadership and Organizational Theory.

- + **Kercheval, Alec N.**, Ph.D., 1987, California at Berkeley; Associate Professor of Mathematics, College of Arts and Sciences. Fields: Financial Mathematics, Dynamical Systems.
- * **Kim, DaeKwan**, Ph.D., 2003, Michigan State, Assistant Professor, Business Admin. Fields: Information Technology and its Implications for a Firm's International Marketing Activities; Information Technology for Supply Chain Management; e-Commerce; International Channel Relationships; Family Conglomerates in Emerging Markets; Global Account Management.
- + **Kim, Eundeok**, Ph.D., 2002 Iowa State, Assistant Professor, Clothing, Textiles & Merchandising. Fields: Creative and technological aspects of apparel design, aesthetics, historical and cultural aspects of dress.
- + **Kim, Hee Min**, Ph.D., 1990, Washington University in St. Louis; Professor of Political Science, College of Social Sciences. Fields: Comparative Politics, Political Economy and Public Policy, Formal Theory and Methodology.
- + **Kim, Kyounghee**, Ph.D., 2003, Indiana University, Assistant Professor, Mathematics. Fields: Complex Dynamical Systems, Probability Theory and application to Mathematical Finance.
- * **Kim, Kyunghye**, Ph.D., 2002, Rutgers; Assistant Professor, School of Information Studies. Fields: Human Information Behavior, Digital Libraries.
- * **Kim, Suk-Kyung**, Ph.D., 2006, Texas A&M, Assistant Professor Clothing, Textiles & Merchandising.
- + **Kimbrell, James H.**, Ph.D., 1999, Missouri; Assistant Professor in English, Field: Creative Writing (poetry).
- + **Kinloch, Graham**, Ph.D., 1968, Purdue; Associate Dean for Academic Affairs, and Professor of Sociology. Fields: Minority Group Relations, Sociological Theory, Sociology of Knowledge.
- + **Kirby, David K.**, Ph.D., 1969, Johns Hopkins; Robert O. Lawton Distinguished Professor, 2003-2004, Professor of English, McKenzie Professor, 1989. Fields: Nineteenth-Century American Literature, Contemporary Literature, Creative Writing.
- + **Kish, Stephen A.**, Ph.D., 1982, North Carolina; Associate Professor and Associate Chair of Geological Sciences. Fields: Igneous and Metamorphic Petrology, Isotope Geology, Economic Geology.
- + **Kistner, Janet A.**, Ph.D., 1981, State University of New York at Binghamton; Professor and Chair of Psychology. Fields: Learning and Behavior Problems of Children, Problematic Social Interactions of Children, Childrens Responses to Failure.
- + **Kite-Powell, Jeffery T.**, Ph.D., 1976, University of Hamburg; Professor of Music. Fields: Musicology, Music Literature, Early Music.
- + **Klassen, Eric P.**, Ph.D., 1987, Cornell; Professor and Associate Chair, Mathematics, College of Arts and Sciences. Fields: Topology and Geometry of Three- and Four-dimensional Manifolds, Knot Theory, Riemann Surfaces, Representation Theory; Gauge Theory.
- + **Klay, William E.**, Ph.D., 1974, Georgia; Professor of Public Administration and Policy Studies, College of Social Sciences. Fields: Policy Development, Budgeting and Financial Administration, Personnel and Labor Relations.
- + **Kleck, Gary D.**, Ph.D., 1979, Illinois at Urbana-Champaign; Professor of Criminology and Criminal Justice. Fields: Gun Control, Weapons/Criminology, Violence.
- + **Klick, Jonathan**, J.D., 2003, George Mason; Ph.D., 2001, George Mason; Jeffrey A. Stoops Professor of Law. Fields: Law and Economics, Business Associations, Corporate Governance, Statistics for Lawyers.
- + **Klooster, Daniel J.**, Ph.D., 1997, California at Los Angeles; Assistant Professor of Geography. Fields: Mexico, Peasant Agriculture, Deforestation Resource Conservation.
- + **Knight, Gary A.**, Ph.D., 1997, Michigan State; Associate Professor of Marketing, College of Business. Fields: International Business and Research Methodology.
- * **Knill, April M.**, Ph.D., 2005, University of Maryland, Assistant Professor, Business Administration. Fields: International Finance, Corporate Finance, Entrepreneurship, Corporate Governance.
- + **Kodras, Janet E.**, Ph.D., 1982, Ohio State; Professor of Geography. Fields: Hunger and Poverty, Population, Public Policy, Quantitative Methods.
- + **Koehlinger, Amy L.**, M.A., Assistant Professor of Religion. Fields: American Religious History, American Catholicism.
- + **Koen, Benjamin D.**, Ph.D., Ohio State; Assistant Professor, School of Music. Fields: Ethnomusicology.
- * **Koenig, Peter A.**, M.A., Associate Professor of Interior Design. Fields: Architectural Rendering, Non-Residential Design, and Office Space Planning.
- + **Kopriva, David A.**, Ph.D., 1982, Arizona; Professor of Mathematics and Mechanical Engineering. Fields: Computational Fluid Dynamics, Spectral Methods.
- + **Korzenny, Felipe**, Ph.D., 1997, Michigan State; Professor, College of Communication. Fields: Hispanic Marketing Communication, Advertising, Research Methods, Market Research, Diffusion of Innovations; Intercultural Communication; New Communication Technology.
- + **Koschnik, Albrecht O.**, Ph.D., 2000, Virginia; Assistant Professor of History, College of Arts and Sciences Field: Early American History.
- * **Koslow, Jennifer**, Ph.D., 2001, UCLA, Assistant Professor, History. Fields: Public History, Urban History, Gilded Age and Progressive Era, Public Health and Women's History.
- + **Kostka, Joel E.**, Ph.D., 1993, Delaware; Associate Professor of Oceanography, College of Arts and Sciences. Fields: Microbial Ecology and Biogeochemistry, Carbon and Nutrient Cycling in Coastal Marine Environments, Bacteria/Mineral Interactions.
- * **Kostov, Milen**, Ph.D., 2003, Pennsylvania State, Assistant Professor, Chemical & Biomedical Engineering. Fields: Nanoscience for clean energy technologies, chemical reactions in nano-porous media, multi-scale modeling, simulation and theory of nanoscale materials, physical adsorption of gases in nanomaterials and materials applications.
- + **Kowalsky, Frank**, D.M.A., 1973, Catholic University; Joseph A. White Professor of Music, 2000. Fields: Clarinet Performance, Woodwind Literature.
- + **Krafft, Marie E.**, Ph.D., 1983, Virginia Polytechnic Institute and State University; Martin A. Schwartz Professor of Chemistry and Biochemistry, 2002. Fields: Synthetic Organic and Organometallic Chemistry, Natural Products Synthesis.
- * **Krantz, Muray**, Ph.D., 1969, Penn State, Professor, Family & Child Sciences. Fields: Child care, social competence of young children, sharing behavior of children.
- + **Kraus, Joseph C.**, Ph.D., 1987, Univ. of Rochester-Eastman, Professor Music Composition and Theory. Fields: Music Theory.
- + **Krishnamurti, Ruby E.**, Ph.D., 1967, California at Los Angeles; Professor of Oceanography, and Research Associate, Geophysical Fluid Dynamics Institute. Fields: Turbulent Convection, Chaos, Fluid Instability, Atmospheric Convection, Large Scale Ocean Circulation.
- + **Krishnamurti, Tiruvalam N.**, Ph.D., 1959, Chicago; Professor of Meteorology, Robert O. Lawton Distinguished Professor 1985-1986. Fields: Tropical Meteorology, Numerical Weather Prediction.
- + **Krothapalli, Anjaneyulu**, Ph.D., 1979, Stanford; Chair and Professor of Mechanical Engineering and Don Fuqua Eminent Scholar in Engineering and Science. Fields: Experimental Fluid Mechanics, Aeroacoustics, Robotics.
- + **Kroto, Harold W.**, Ph.D., 1964, Univ. of Sheffield, Epps Professor, Chemistry. Fields: Nanoscience and nanotechnology, self assembly of inorganic organic and biochemical 2D nanoscale networks, molecular composition of carbon vapour, mechanism of formation of nanostructured materials.
- + **Kubik, Ladislav**, Ph.D., 1980, Prague Academy of Music; Professor of Music. Field: Composition of Music.
- + **Kumar, Piyush**, Ph.D., 2004, SUNY, Assistant Professor, Computer Science. Fields: Computational Geometry, Design and Analysis of Algorithms, Pattern recognition and machine learning.
- * **Kutnjak Ivkovic, Sanja**, Ph.D., 1995, Delaware; Assistant Professor of Criminology. Fields: policing, courts, comparative criminology and criminal justice, and law and society as four fields.
- + **Kwan, Bing W.**, Ph.D., 1984, Ohio State; Associate Professor of Electrical and Computer Engineering. Fields: Transient Electromagnetic Scattering Phenomenon, Microstrip Antennas, Asymptotic Techniques and Numerical Methods in Electromagnetics, Artificial Neural Systems.
- + **Kwon, Hyungil (Harry)**, Ph.D., 2002, Ohio State; Assistant Professor, Sports Management, Recreation Management & Physical Education, College of Education. Fields: Sport Management and Business Marketing.
- * **Lacher, Robert**, Ph.D., 1966, University of Georgia, Assistant In, Computer & Information Science. Fields: Software Engineering, Machine Intelligence, Computational Topology.
- + **Lake, Vickie E.**, Ph.D., 1999, Texas; Assistant Professor of Elementary and Early Childhood Education and Practice. Fields: Moral Education, Anti-violence Programs and Curriculum, Teacher Education, Qualitative Research.
- + **Lamont, Bruce T.**, Ph.D., 1989, North Carolina; Chairman and Professor of Management, College of Business. Fields: Strategic Management, Diversification.
- + **Lan, Feng**, Ph.D., 1998, Notre Dame; Assistant Professor of Modern Languages. Field: Chinese Language.
- + **Landing, William M.**, Ph.D., 1983, California at Santa Cruz; Professor of Oceanography. 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.
- + **Lang, Alan R.**, Ph.D., 1978, Wisconsin at Madison; R. Robert Browning Professor of Psychology, 2001. Fields: Psychosocial Aspects of Health Problems and Behavior Disorders, especially the Addictions; Alcohol and Family Interactions, including Conversational Behavior, General Psychopathology, and Individual Differences.
- + **Lang, Laura B.**, Ph.D., 1993, Florida State; Associate Professor and Director, Learning Systems Institute. Fields: Ed. Leadership, Assessment Student Performance, reading & Expertise.
- + **LaPointe, Leonard L.**, Ph.D., 1969, Colorado; Francis Eppes Professor of Communication Disorders. Fields: Neuroanatomy, Neuropathology, and Neurophysiology of Communication Disorders; Aphasia and Neuromotor Speech Disorders; Effects of Distraction, Interference, and Competition on Communication, Attention, and Memory.
- + **Larbalestier, David C.**, Ph.D., 1970, Imperial College, University of London. Professor, Philosophy.
- + **Lasker, Joanne P.**, Ph.D., 1997, Nebraska; Assistant Professor of Communication Disorders. Fields: Augmentative and Alternative Communication; Neurogenic Communication Disorders.
- + **Lata, Matthew L.**, B.A., Associate Professor, School of Music. Fields: Voice Performance/Opera.
- + **Latham, Don**, Ph.D., 1995, University of Georgia, Assistant Professor, Library & Information Studies. Fields: Youth Services.
- + **Laughlin, Karen**, Ph.D., 1982, Toronto; Associate Professor of English and Dean of Undergraduate Studies. Fields: Modern Drama, Feminist Theory, Creative Writing.
- + **Launer, Michael K.**, Ph.D., 1970, Princeton; Service Professor of Modern Languages and Linguistics. Fields: Applied Linguistics and Structure of Modern Russian.
- * **Leahy, Gerard J.**, M.F.A., Professor of Theatre. Field: USA 829, Scenery and Costume Design.
- * **Leaming, Greg**, MFS, 1982, University of Massachusetts, Professor, Theatre. Fields: Directing.
- + **LeBlanc, Leona B.**, Ph.D., 1970, Kansas; Professor of Modern Languages and Linguistics. Fields: French Pedagogy, French Literature.

- + **Lee, Choogon**, Ph.D., 1998, Rutgers University, Assistant Professor, Biomedical Sciences. Fields: Neurobiology, Molecular Biology.
- + **Lee, Robert E.**, Ph.D., 1968, Princeton University; Professor of Family and Child Sciences, College of Human Sciences. Fields: Education and training in marital and family therapy; best practices in family therapy supervision, foster care, and in while family psychometric assessment.
- * **Lee, Ruby PuiWan**, Ph.D., 2003, Washington State University, Assistant Professor, Business Administration. Fields: Financial returns on marketing strategy; Marketing strategy; Interfirm relationships; Organizational learning and knowledge management; New product development and introductions; International marketing and business.
- * **Lee, Susan J.**, Ph.D., 2002, Michigan; Assistant Professor of Art History, School of Visual Arts and Dance. Fields: Japanese and Korean Art History.
- + **Lee, Tahirih V.**, J.D., 1989, Yale; Ph.D., 1990, Yale; Associate Professor of Law. Fields: Chinese Law, Chinese Legal History, Comparative Law, Civil Procedure, International Business Transactions.
- * **Lee, Young-A**, Ph.D., 2005, Michigan State, Assistant Professor, Clothing, Textiles & Merchandising. Fields: Apparel product development, with emphasis on design issues and fit satisfaction of the elderly.
- * **Lee, Bong-Soo**, Ph.D., 1986, Minnesota, Professor, Business Administration. Fields: Financial Economics; Applied Time-Series Econometrics; Macro-Monetary economics; International Finance (East Asia).
- + **Leeser, Michael**, Ph.D., 2003, Illinois, Assistant Professor, Modern Languages. Fields: Linguistics (Second Language Acquisition).
- + **Leib, Jonathan I.**, Ph.D., 1992, Syracuse; Associate Professor of Geography. Fields: Political Geography, Elections, Redistricting, Race, Political Representations of the South.
- + **Leiber, Justin**, Ph.D., 1967, University of Chicago, Professor Philosophy.
- + **Leparulo, William E.**, Dottore in Materie Letterarie, 1960, Salerno, Italy; Professor of Modern Languages and Linguistics. Field: Modern Italian Literature.
- + **Leszczynska, Danuta**, Ph.D., 1978, Technical University of Wroclaw; Associate Professor of Civil and Environmental Engineering. Field: Environmental Engineering.
- + **Leuhsuis, Reinier**, Ph.D., 2000, Princeton; Assistant Professor of Modern Languages, College of Arts and Sciences. Fields: Sixteenth-Century French and Italian Literature.
- + **Levenson, Cathy W.**, Ph.D., 1993, Chicago; Associate Professor of Nutrition, Food and Exercise Science. Fields: Nutrient Regulation of Gene Expression, Molecular Regulation of Trace Mineral Metabolism.
- + **Levenson, David B.**, Ph.D., 1980, Harvard; Associate Professor of Religion, Distinguished Teaching Professor, 1992-1993. Fields: New Testament and Early Christianity, Early Judaism, Greco-Roman Religions.
- + **Levitan, Don R.**, Ph.D., 1989, Delaware; Associate Professor of Biological Science. Field: Evolutionary Ecology and Population Biology of Marine Invertebrates.
- + **Lewis, Sandra**, Ed.D., 1993, California at Berkeley; Associate Professor of Special Education. Fields: Education and Rehabilitation for Blind and Visually Impaired Individuals, Service Delivery, Public Policy.
- + **Li, Hong**, Ph.D., 1994, Rochester; Assistant Professor of Chemistry and Biochemistry. Fields: X-ray Crystallography, Molecular Principles of Protein and RNA Interactions, Gene Expression and Regulation.
- + **Li, Hui (Helen)**, Ph.D., 2000, Tennessee; Visiting Assistant Professor of Electrical and Computer Engineering. Fields: Power Electronics, Motor Drive Control, Modeling and Simulation of Control System.
- * **Li, Huijun**, Ph.D., 2003, Arizona; Visiting Assistant Professor of Educational Psychology, College of Education. Fields: Anxiety & Depression in Children with Disabilities, Validation of Gifted, Rating Scales in China, Disability Research & Policy.
- + **Liang, Zhiyong**, Ph.D., 2000, Beijing University of Aeronautics; Visiting Associate Professor of Industrial Engineering. 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.
- + **Licht, Barbara G.**, Ph.D., 1980, Illinois at Urbana-Champaign; Associate Professor of Psychology. 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.**, Ph.D., 1980, Illinois at Urbana-Champaign; Associate Professor of Psychology. 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 W.**, Ph.D., 1965, California at Riverside; Professor of Educational Leadership, Learning Systems Institute. Fields: Leading Organizational Change, Transformational Leadership, Learning Organizations, Mathematics.
- + **Lind, David M.**, Ph.D., 1986, Rice; Associate Professor of Physics. Fields: Experimental Physics, Surfaces, Thin Films, Magnetic Properties of Solids.
- * **Lindbloom, Terri L.**, M.F.A., Associate Professor of Art. Field: Sculpture.
- + **Liu, Guosheng**, Ph.D., 1990, Nagoya University; Associate Professor of Meteorology. Fields: Radioactive Transfer, Satellite Remote Sensing, and Applications of Satellite Measurements to Weather Forecasting and Climate Research.
- + **Liu, Xiuwen**, Ph.D., 1999, Ohio State; Assistant Professor of Computer Science. Fields: Computer Vision, Visual Recognition and Modeling, Image Compression, Computer Graphics, Machine Learning, Artificial Intelligence.
- + **Lloyd, Donald A.**, Ph.D., 2000, Toronto; Assistant Professor of Sociology and Courtesy Assistant Professor of Medicine. Fields: Mental Health, Alcohol and Drugs, Quantitative Methodology.
- + **Locke, Bruce R.**, Ph.D., 1989, North Carolina State; Professor of Chemical Engineering. Fields: Bioengineering-Macromolecular Separations Electrophoretic Transport, Chromatography, Enzyme Reaction Catalytic 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 Photocatalysis.
- + **Logan, Timothy M.**, Ph.D., 1991, Chicago; Associate Dean and Associate Professor of Chemistry and Biochemistry. Fields: Protein Structural Biology; Glycosylated Protein Structure and Function; Protein Dynamics in Catalysis; High Resolution NMR Spectroscopy.
- + **Loney, Bryan R.**, Ph.D., 2000, Alabama; Assistant Professor of Psychology. Fields: Clinical Psychology, Gender Differences in Severe Youth Antisocial Behavior, Subtyping of Childhood Conduct Disorders, Child and Adolescent Psychopathy, Developmental Psychopathology, Emotional Processing and the Disruptive Behavior Disorders, Hormones and Childhood Emotional/Behavioral Functioning.
- * **Long, Timothy R.**, B.A., Assistant in Film, School of Motion Picture, Television, and Recording Arts. Field: Screenwriting.
- + **Lonigan, Christopher J.**, Ph.D., 1991, State University of New York at Stony Brook; Professor of Psychology, College of Arts and Sciences. 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.
- + **Losh, Susan**, Ph.D., 1973, Michigan; Associate Professor of Educational Research. Fields: Sex Roles and Gender, Statistics and Methods, Social Psychology.
- + **Lourenco, Luiz M.**, Ph.D., 1984, Oporto, Portugal; Professor of Mechanical Engineering. Fields: Optical Diagnostics, Experimental Methods.
- + **Louwenaar, Karyl J.**, D.M.A., 1974, Eastman School of Music; Professor of Music. Fields: Piano and Harpsichord Performance, Keyboard Literature, Early Music.
- * **Lowe, Jeffrey**, Ph.D., 2001, Rutgers, Assistant Professor, Urban & Regional Planning. Fields: Community Development and Housing, Anti-poverty Policy.
- + **Luke, Charlene D.**, J.D., 1995, Brigham Young; Assistant Professor of Law. Fields: Corporate Income Taxation, Tax Policy, Taxation of Pass-Through Entities.
- * **Lundeen, Cynthia A.**, Ph.D., 2002, North Carolina at Chapel Hill; Assistant Professor of Elementary and Early Childhood Education. Fields: Elementary Education, Science Education, Parent Involvement and Beginning Teachers.
- + **Luongo, Cesar A.**, Ph.D., 1986, Stanford; Associate Professor of Mechanical Engineering. Fields: Applied Superconductivity, Magnet Design and Analysis, Computer Simulation in Engineering.
- * **Luschei, Thomas F.**, Ph.D., 2006, Stanford, Assistant Professor, Foundation of Education. Fields: International Comparative Education, Economics of Education.
- * **Lustria, Mia**, Ph.D., 2005, University of Kentucky, Assistant Professor, Library & Information Studies. Fields: Consumer Health Informatics.
- + **Lynn, Susan K.**, Ph.D., 1989, South Carolina at Columbia; Associate Professor of Sport Management, Recreation Management and Physical Education. Field: Physical Education.
- + **Ma, Teng**, Ph.D., 1991, Ohio State; Assistant Professor of Chemical Engineering. Fields: Cell and Tissue Engineering, Biomaterials.
- + **Macesich, George**, Ph.D., 1958, Chicago; Professor of Economics. Fields: Monetary Theory and Policy, Comparative Systems with Emphasis on Europe (and East Europe in particular).
- + **MacPherson, David A.**, Ph.D., 1987, Pennsylvania State; Abba Lerner Professor of Economics, 2000. Field: Labor Economics.
- * **Maddox, Martha K.**, M.S.W., Director of Undergraduate Program and Associate Professor of Social Work. Fields: Clinical Social Work in Health Care Settings, Health Policy, Aging.
- * **Madsen, Charles H., Jr.**, Ph.D., 1965, Illinois; Professor of Psychology. Fields: Suicidology, Cognitive Behavioral Therapy, Hypnotherapy, Familial Interactions.
- + **Madsen, Clifford K.**, Ph.D., 1963, Florida State; Professor of Music, Alumni Professor, Robert O. Lawton Distinguished Professor 1988-1989, Distinguished Teaching Professor, 1989-1990. Fields: Music Therapy, Music Education.
- * **Maestas, Cherie D.**, Ph.D., 2000, Colorado; Assistant Professor, Political Science, College of Social Sciences. Fields: American Politics.
- + **Magnan, Jerry F.**, Ph.D., 1979, Miami; Associate Professor of Mathematics, and Scholar/Scientist, School of Computational Science and Information Technology. Fields: Bifurcation Theory, Parallel Computing.
- * **Maier-Katkin, Birgit**, Ph.D., 1998, Pennsylvania State; Assistant Professor of Modern Languages, College of Arts and Sciences. Fields: Late 19th and 20th Century German Literature, Gender and Cultural Studies.
- + **Maier-Katkin, Daniel**, J.D., 1968, Columbia University; Dean and Professor of Criminology and Criminal Justice. Fields: Criminology and Criminal Law, Law and Society, Crime and Delinquency/Juvenile Justice, Infanticide.
- + **Maner, Jon K.**, Ph.D., 2003, Arizona State; Visiting Assistant Professor of Psychology, College of Arts and Sciences. Fields: Relationship Between Motivation, Emotion, and Social Cognition.
- + **Manousakis, Efstratios**, Ph.D., 1985, Illinois at Urbana-Champaign; Professor of Physics, and Scholar/Scientist, Computational Science and Information Technology. Fields: Theoretical Physics; Condensed-Matter Physics, Many-Body Theory, Superfluidity, Superconductivity.

- + **Marcus, Nancy H.**, Ph.D., 1976, Yale; Robert O. Lawton Distinguished Professor, 2001-2002, Mary Sears Professor of Oceanography, 2000, and Dean of Graduate Studies. Fields: Evolution, Ecology, and Population Genetics of Marine Zooplankton, Developmental Responses of Organisms to Environmental Change, Dormancy.
- + **Marincola, John M.**, Ph.D., 1985, Brown; Visiting Associate Professor, Classics, College of Arts and Sciences. Fields: Greek & Roman historiography and rhetoric.
- Markel, Dan**, J.D., 2001, Harvard; Assistant Professor of Law. Fields: Torts, Criminal Law, Criminal Procedure, Civil Litigation.
- Markell, David L.**, J.D., 1979, Virginia; Steven M. Goldstein Professor of Law. Fields: Environmental Law, Administrative Law, Land Use, Torts.
- + **Marlowe, Frank W.**, Ph.D., 1997, UCLA, Associate Professor, Anthropology. Fields: Evolutionary Anthropology, Behavioral Ecology, Hunter-Gatherers, Mating Systems, Mate Preferences, Cooperation.
- + **Maroney, Patrick F.**, J.D., 1975, Florida; Professor of Risk Management/Insurance, Real Estate and Business Law. Fields: Administrative Law, Insurance Law, Workers Compensation, Insurance Regulations.
- + **Marquis, Milton H.**, Ph.D., 1985, Indiana University; Professor of Economics. Fields: Monetary Economics, Econometrics.
- * **Marrinan, Rochelle A.**, Ph.D., 1975, Florida; Associate Professor of Anthropology. Fields: Prehistoric and Historic Archaeology, Method and Theory in Archaeology, Zooarchaeology, Southeastern United States and Caribbean.
- + **Marshall, Alan George**, Ph.D., 1970, Stanford; Distinguished Research Professor, 1998-1999, Kasha Professor of Chemistry and Biochemistry, 2000. 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.
- * **Martin, Leisa A.**, Ph.D., 2003, Oklahoma; Assistant Professor, Middle and Secondary Education, College of Education Social Science Education. Fields: Citizenship.
- + **Martin, Patricia Y.**, Ph.D., 1969, Florida State; Professor of Sociology, Alumni Professor. Fields: Sociology of Organizations, Sociology of Gender, Sociology of Work, Field Research Methods.
- + **Martinko, Mark J.**, Ph.D., 1977, Nebraska; Professor of Management. Fields: Organization Behavior, Research Methods, Behavior Management, Leadership.
- + **Marty, Paul F.**, Ph.D., 2002, Illinois at Urbana; Assistant Professor, School of Information Studies. Fields: Museum informatics, computer-supported cooperative work, information behavior, and usability engineering.
- * **Mason, Katherine Pieper**, Ed.D., 1984, Florida; Dean, School of Nursing, and Professor of Nursing. Fields: Public Health.
- + **Mason, Patrick L.**, Ph.D., 1991, New School of Social Research, New York; Associate Professor and Director, African American Studies Program. Fields: Labor Economics, Political Economy.
- + **Mast, Austin**, Ph.D., 2000, Wisconsin, Assistant Professor, Biological Science. Fields: Research involves topics at the interfaces of plant evolution, ecology, biogeography, development, molecular genetics, systematics, and bioinformatics.
- + **Mastrogiacomo, Leonard J.**, B.M., Professor of Music. Fields: Piano Performance, Piano Literature.
- + **Matherly, Timothy A.**, D.B.A., 1983, Indiana University; Associate Professor of Management. Fields: Strategic Management, Organization Behavior, Personality and Goal Setting.
- + **Mathes, James R.**, Ph.D., 1986, Florida State; Associate Professor of Music. Field: Theory.
- + **Mayo, John K.**, Ph.D., 1972, Stanford; Dean, College of Communication, and Professor of Communication. Fields: Development, Communication, Diffusion of Innovations, Distance Education.
- + **Mazza, Nicholas F.**, Ph.D., 1981, Florida State; Professor of Social Work. Fields: Family Social Work, Arts and Mental Health, Mental Health.
- * **McCabe, Janice**, Ph.D., 2006, Indiana Univ., Assistant Professor Sociology. Fields: Education, Gender, Race, Sexuality, Childhood, Social Psychology, Qualitative and Quantitative Methods.
- * **McCaleb, Thomas S.**, Ph.D., 1975, North Carolina at Chapel Hill; Associate Professor of Economics, and Program Director, Office of Dean of Social Science. Fields: Public Finance, political economy, economics and the law.
- + **McClung, Steven R.**, Ph.D., 1999, Tennessee; Assistant Professor of Communication. Fields: Research methods; New technologies; Marketing; Traditional media use of the internet; Information representation; Diffusion of Innovations.
- + **McClure, Charles R.**, Ph.D., 1977, Rutgers; Francis Eppes Professor of Information Studies. Fields: Planning and Evaluation of Information Services, Federal Information Policy, Information Resources Management.
- * **McCreary, Samuel M.**, Ph.D., 2003, Virginia Polytechnic Institute and State University; Visiting Assistant Professor, Public Administration and Policy, College of Social Sciences. Fields: e-government, health policy, professional ethics, public management, information technology.
- * **McCullough, Kathleen A.**, Ph.D., 2000, University of Georgia. Assistant Professor of Risk Management and Insurance. Fields: Enterprise risk management, mergers and acquisitions in the financial services industry, as well as implications of earnings management and regulation in the field of risk management and insurance.
- + **McDowell, Stephen D.**, Ph.D., 1988, York University of Toronto; Associate Professor and Chair of Communication. Fields: Communications Policy, New Technologies, International Communication.
- + **McElrath, Joseph R.**, Ph.D., 1973, South Carolina; William Hudson Rodgers Professor of English, 1999, and Associate Dean of Arts and Sciences. Fields: Nineteenth-Century American Literature, Bibliography and Textual Studies.
- + **McGee, Daniel L.**, Ph.D., 1978, John Hopkins; Professor of Statistics. Fields: Epidemiological Analysis, Prognostic Models, Clinical Trials, Cardiovascular Epidemiology.
- + **McGregory, Jerrilyn**, Ph.D., 1992, Pennsylvania; Associate Professor of English. Fields: Folklore, African American Literature.
- + **McKenna, Michael**, Ph.D., 1993, University of Virginia, Associate Professor Philosophy.
- + **McMahon, Darrin M.**, Ph.D., 1997, Yale; Associate Professor of History, College of Arts and Sciences. Fields: French Revolution, European Enlightenment, Intellectual and Cultural.
- + **McNaughton, David A.**, B.Phil., 1970, Magdalen; Professor of Philosophy, College of Arts and Sciences. Fields: Ethics, 18th-Century British Moral Philosophy, Philosophy of Religion.
- + **McNeece, C. Aaron**, Ph.D., 1976, Michigan; Walter W. Hudson Professor of Social Work, 2000. Fields: Substance Abuse, Justice System.
- + **McRorie, Sally E.**, Ph.D., 1985, Kansas; Professor of Art Education and Dean of Visual Arts, Theatre and Dance. Fields: Art Education, Aesthetics.
- + **McWey, Lenore M.**, Ph.D., 2002, Florida State; Assistant Professor, Family and Child Sciences, College of Human Sciences. Fields: Therapeutic interventions with families in the foster care system; in-home therapy; best practices in marriage and family therapy.
- + **Mears, Daniel**, Ph.D., 1998, Texas-Austin, Associate Professor, Criminology & Criminal Justice. Fields: Crime and Delinquency, Juvenile and Criminal Justice, Policy.
- + **Meighan, Patrick J.**, M.M., Professor of Music. Fields: Saxophone Performance, Woodwind Literature.
- + **Mele, Alfred R.**, Ph.D., 1979, Michigan; Professor of Philosophy. Fields: Action Theory, Philosophy of Mind, Metaphysics, Ancient Greek Philosophy.
- + **Menchetti, Bruce M.**, Ph.D., 1987, Illinois at Urbana-Champaign; Associate Professor of Special Education. Fields: Secondary Education and Transitional Services, Community-Based Instruction and Curriculum Development, Ecological Assessment and Supported Employment.
- + **Meredith, Michael**, Ph.D., 1974, Pennsylvania; Professor of Biological Science. Fields: Sensory Physiology, Chemical Communication.
- + **Mesev, Trajco V.**, Ph.D., 1995, University of Bristol; Associate Professor, Geography, College of Social Sciences. Fields: Remote Sensing, Geographical Information Systems.
- * **Messersmith, Mark L.**, M.F.A., Professor of Art. Field: Painting.
- + **Mesterton-Gibbons, Mike**, Ph.D., 1977, Oxford; Professor of Mathematics. Fields: Game-Theoretic and Dynamic Modeling in Ecology, Economics and Natural Resource Management.
- * **Meyer, James B.**, J.D., 1983, Mercer School of Law; Associate Professor of Psychology. Fields: Law and Psychology, Psychological Ethics and Malpractice, Jury Selection, Mental Health Testimony.
- + **Meyer-Baese, Anke**, Ph.D., 1995, Darmstadt University; Assistant Professor of Electrical and Computer Engineering. Fields: Digital Signal and Image Processing, Neural Networks, Theory of Nonlinear Systems.
- + **Meyer-Baese, Uwe H.**, Ph.D., 1995, Darmstadt University; Assistant Professor of Electrical and Computer Engineering. Fields: Computer Arithmetic, ASIC and FPGA Synthesis, Digital Signal Processing.
- * **Mikkelsen, Ann**, Ph.D., 2001, UC Irvine, Assistant Professor, English.
- + **Miles, Rebecca S.**, Ph.D., 1988, Cornell; Associate Professor of Urban and Regional Planning. Fields: International Development Planning, Gender and Development.
- + **Miller, Brian**, Ph.D., 2001, UNC Chapel Hill, Assistant Professor, Chemistry. Fields: Enzymology, Protein Structure and Function, Magnetoreception, Biomolecular Evolution.
- * **Miller, Susan M.**, Ph.D., 2005, Wisconsin-Madison, Assistant Professor, Rehab. Counseling. Fields: Rehabilitation Counseling, Psychological Aspects of Disability.
- + **Miller, Thomas E.**, Ph.D., 1985, Michigan State; Associate Professor of Biological Science. Fields: Plant Evolutionary Biology and Community Ecology.
- + **Milligan, Jeffrey A.**, Ph.D., 1998, Oklahoma; Assistant Professor of Educational Leadership and Policy Studies. Fields: Philosophy of Ed., International-Comparative Ed., Cultural Studies.
- + **Milton, Sande**, Ph.D., 1977, Cornell, Professor, Educational Leadership. Fields: Sociology of Education, Educational Policy, International/Intercultural Development, Educational Research Methodology, Education & Equality.
- * **Mineo, Claudia**, Ph.D., 2006, UCLA, Assistant Professor, History. Fields: Early Modern Spain, political culture, laws, towns and women.
- + **Mio, Washington**, Ph.D., 1984, Courant Institute-New York University; Associate Professor of Mathematics. Fields: Geometric Topology, Topology of Manifolds, Knot Theory.
- + **Moerland, Timothy S.**, Ph.D., 1984, Maine; Professor of Biological Science, and Associate Dean, College of Arts and Sciences. Fields: Energetics of Muscle Contraction, Temperature Adaption.
- + **Moffatt, Robert J.**, Ph.D., 1985, Michigan; Georgia Alice Stamford Professor of Exercise Science, 2000, Professor of Nutrition, Food and Exercise Sciences, College of Human Sciences. Fields: Exercise and Lipoprotein Metabolism, Cigarette Smoking and Cessation from Cigarette Smoking on Energy Balance and Lipoprotein Metabolism.
- * **Mon, Lorri**, Ph.D., 2006, University of Washington, Assistant Professor Information Studies. Fields: Digital Reference/e-Government.
- + **Mondello, Michael J.**, Ph.D., 1999, Florida; Assistant Professor of Sport Management, Recreation Management and Physical Education. Field: Sport Finance.
- + **Montgomery, Maxine L.**, Ph.D. 1986, University of Illinois. Associate Professor of English. Fields: Twentieth-Century American Literature, African American Literature.

- + **Moore, Carl A.**, Ph.D., 2001, Northwestern University. Visiting Assistant Professor of Mechanical Engineering. Fields: Human Robot Interaction, Robot Assisted Manufacturing and Design, Mobile Robotics, Intelligent Machine Design.
- * **Moore, Christopher R.**, D.M.A., 2002, Rochester; Assistant Professor, School of Music. Fields: Brass Performance/Literature.
- + **Moore, Dennis D.**, Ph.D., 1990, North Carolina at Chapel Hill; Associate Professor of English, Distinguished Teaching Professor, 1998-1999. Fields: Early American Literature.
- + **Moore, Mary Ann**, Ph.D., 1980, Florida State; Professor of Textiles and Consumer Sciences. Fields: Textile Economics, Color Measurement, Colorfastness to Light and Weathering.
- + **Moore, William H.**, Ph.D., 1991, Colorado at Boulder; Professor of Political Science, College of Social Sciences. Fields: International Relations, Political Conflict.
- + **Morales, Maria H.**, Ph.D., 1992, Pennsylvania; Associate Professor of Philosophy. Fields: Political Philosophy, Ethics, Philosophy of Law, Ancient Greek Philosophy, Feminism.
- * **Morgan, Anthony T.**, B.S., Professor of Dance. Fields: Contemporary Dance Technique, Choreography, Performance.
- + **Morris, Richard J.**, Ph.D., 1986, Florida; Associate Professor and Chair of Communication Disorders. Fields: Communication and Aging, Voice Disorders, Physiologic Phonetics, Acoustic Phonetics, Anatomy and Physiology of Speech.
- + **Morton, Richard M.**, Ph.D., 1994, Pennsylvania; Associate Professor of Accounting. Fields: Empirical Financial Accounting.
- + **Mtenga, Primus V.**, Ph.D., 1991, Wisconsin at Madison; Associate Professor of Civil and Environmental Engineering. Fields: Structural Engineering, Wood Structures, System Performance and Reliability.
- + **Mullis, Ann K.**, Ph.D., 1978, Iowa State; Associate Professor of Family and Child Sciences. Fields: At-risk Children, Community Enhancement of Human Resources, Welfare Reform and Public Policy.
- + **Mullis, Ronald L.**, Ph.D., 1978, Iowa State; Professor of Family and Child Sciences. Fields: Parent-Child Relationships, Adolescent Development, Social Cognition, Child Care.
- * **Munton, Peter**, M.A., Associate Chair and Associate Professor of Interior Design. Fields: Theatre Design, Hospitality Design, Creative Problem Solving.
- * **Muscha, Colleen L.**, M.F.A. Professor of Theatre. Fields: USA, Costume Design.
- + **Muslimani, Ziad**, Ph.D., 2002, ISR Institute of Technology, Assistant Professor, Mathematics.
- + **Mussa, Renatus**, Ph.D., 1996, Arizona State; Assistant Professor of Civil and Environmental Engineering. Fields: Intelligent Transportation Systems, Highway Safety, Traffic Operations and Control.
- * **Myers, Karen L.**, M.S., Associate Professor of Interior Design. Fields: Architectural and Design History.
- * **Nall, Cecily**, MM, 2004, Cincinnati, Assistant Professor, Music Performance. Fields: Vocal Performance.
- * **Nalley, James H.**, D.M.A., 1998, Rochester; Assistant Professor, School of Music. Fields: Keyboard Performance/Literature.
- + **Nasgaard, Roald**, Ph.D., 1973, Institute of Fine Arts; Chair and Professor of Art. Fields: Modern and Contemporary Art History and Criticism.
- + **Navon, Ionei M.**, Ph.D. 1979, University of the Witwatersrand. Professor of Mathematics and Meteorology and Program Director, School of Computational Science and Information Technology. Fields: Numerical Analysis, Computational Fluid Dynamics, Finite Element Methods, Numerical Optimization, Expert Systems for Solving Partial Differential Equations.
- + **Naylor, Gavin**, Ph.D., 1989, Maryland, Associate Professor, Biological Sciences. Fields: Research in the mechanisms underlying biological diversification at both the organismal level and the molecular level.
- * **Neal, Michael R.**, Ph.D., 2001, University of Louisville, Assistant Professor, English.
- + **Neuman, Robert M.**, Ph.D., 1978, Michigan; Professor of Art History. Fields: Baroque and Eighteenth-Century Art.
- * **Newdome, Beth A.**, B.M., 1986, Eastman School of Music; Assistant Professor of Music. Fields: String Performance/Literature.
- * **Newell, Terrance**, Ph.D., 2006, University Wisconsin-Madison, Assistant Professor Information Studies. Fields: Media Cognition.
- + **Ng, Hon Kie**, Ph.D., 1984, McMaster; Associate Professor of Physics. Fields: Experimental Condensed-Matter Physics, Far-infrared Spectroscopy, Superconductivity, Quantum Size Effects in Selected Clusters.
- + **Nichols, Warren D.**, Ph.D., 1975, Chicago State; Professor of Mathematics. Fields: Commutative Algebra, Hopf Algebras.
- + **Nicholson, Sharon E.**, Ph.D., 1976, Wisconsin; Distinguished Research Professor, 1997-1998, Heinz and Katharina Lettau Professor of Climatology, 2001, and Professor of Meteorology. Fields: Physical and Dynamic Climatology, Tropical Meteorology, Climate Change, Remote Sensing.
- + **Niu, Xufeng**, Ph.D., 1991, Chicago; Professor of Statistics. Fields: Time Series Analysis, Linear and Non-linear Models, Spatial Statistics, Environmental Data Analysis and Asymptotic Theory.
- + **Nnaji, Soronadi**, Ph.D., 1981, Arizona; Visiting Professor of Civil and Environmental Engineering. Fields: Water Resources Systems, Hydrology, Hydraulics, Computer Applications.
- + **Nof, Doron**, Ph.D., 1976, Wisconsin at Madison; Distinguished Research Professor, 2002-2003, and Fridtjof Nansen Professor of Oceanography, 2001. Fields: Mesoscale Phenomena, Nonlinear Sciences, Coastal Oceanography, Ocean Current and Circulation.
- + **Nolder, Craig A.**, Ph.D., 1985, Michigan; Associate Professor of Mathematics. Fields: Complex Analysis and Quasiconformal Mappings.
- + **Norrbin, Stefan C.**, Ph.D., 1986, Arizona State; Professor of Economics. Fields: International Trade and Finance, Macroeconomics, Econometrics.
- * **Novinger, Phillip**, Ph.D., 1968, Kentucky; Service Associate Professor of Mathematics. Fields: Complex Analysis, Constructive Analysis.
- + **Nowacek, Douglas P.**, Ph.D., 1999, Woods Hole; Visiting Assistant Professor of Oceanography, College of Arts and Sciences. Fields: Behavioral Ecology & Bioacoustics of Marine Mammals including Foraging Behavior, Response of Marine Mammals to Anthropogenic Noise, Controlled Exposure Experiments or Playbacks, and Tagging.
- + **Nudd, Donna M.**, A.B.D., 1986, Texas at Austin; Associate Professor of Communication. Fields: Performance Studies, Rhetoric, Gender Studies.
- + **Nymeyer, Hugh**, Ph.D., 2001, California-San Diego, Assistant Professor, Chemistry. Fields: Computational Biophysics; Protein Folding and Dynamics; Theoretical Chemistry.
- + **O'Rourke, James**, Ph.D., 1985, Washington; Professor of English. Fields: British Romanticism, Shakespeare, Literary Theory.
- + **O'Sullivan, Patrick M.**, Ph.D., 1967, London School of Economics; Professor of Geography. Fields: Military, Political, Europe, Britain, Ireland.
- + **Odum, A. Leroy**, Ph.D., 1971, North Carolina; Chair and Professor of Geological Sciences. Fields: Mineral Physics, Geochronology, Isotope Geochemistry.
- * **Ohazama, Tasuku**, M.A., Associate Professor of Interior Design. Field: Architecture.
- + **Ohlsson, Eric P.**, B.M.Ed., 1980, Ohio State; Professor of Music. Fields: Oboe Performance, Woodwind Literature.
- + **Okoli, Okenua Izejiora**, Ph.D., 1996, University of Warwick at Coventry; Assistant Professor of Industrial Engineering. Fields: Manufacture and Characterization of Composite Materials, Manufacturing Engineering and Strategy, Management of Supply Chains.
- + **Okten, Giray**, Ph.D., 1997, Claremont Graduate University, Associate Professor, Mathematics. Fields: Computational Finance, Monte Carlo and quasi-Monte Carlo methods.
- + **Olcese, James**, Ph.D., 1979, Marquette University, Associate Professor, Biomedical Sciences. Fields: Neuroscience.
- + **Oldson, William O.**, Ph.D., 1970, Indiana University; Professor of History. Fields: Balkans, Hapsburg Monarchy, Russia.
- + **Olina, Zane**, Ph.D., 2002, Arizona State; Assistant Professor of Educational Psychology and Learning Systems. Fields: Learning and Evaluation in Corporate Training and Nonprofit Organizations.
- + **Olsen, Dale A.**, Ph.D., 1973, California at Los Angeles; Distinguished Research Professor, 2000-2001, Professor of Music. Field: Ethnomusicology.
- + **Olsen, Stanford D.**, B.M., 1984, University of Utah; Lucille P. and Elbert B. Shelfer Eminent Scholar in Music. Fields: Voice/Opera.
- * **Opel, Andrew R.**, Ph.D., 2001, North Carolina at Chapel Hill; Assistant Professor of Communication. Fields: Media and the environment; media reform and democracy; media activism; alternative media and social movements.
- + **Orcutt, James D.**, Ph.D., 1973, Minnesota; Professor of Sociology. Fields: Deviance, Social Psychology, Sociology of Drugs and Alcohol.
- + **Orr, Penelope P.**, Ph.D., 2003, Purdue; Assistant Professor of Art Education, School of Visual Arts and Dance. Fields: Art Therapy.
- + **Osteryoung, Jerome S.**, Ph.D., 1971, Georgia State; Professor of Finance. Field: Corporate Finance.
- + **Ouimet, Charles C.**, Ph.D., 1980, Brown Professor of Biomedical Science. Field: Neuroscience.
- + **Outlaw, William H., Jr.**, Ph.D., 1974, Georgia; Peter H. Homann Professor of Biological Science, 2001. Field: Plant Physiology.
- + **Overton, J. Michael**, Ph.D., 1987, Iowa; Professor Biomedical Sciences. Fields: Neurophysiology.
- + **Owens, Joseph F., III**, Ph.D., 1973, Tufts University; Distinguished Research Professor, 1994-1995, Guenter Schwarz Professor of Physics, 2000, Associate Dean and Professor of Physics, College of Arts and Sciences. Fields: Theoretical Physics; Elementary Particle Theory.
- * **Owusu, Yaw A.**, Ph.D., 1980, Pennsylvania State; Visiting Associate Professor of Industrial Engineering. Fields: Manufacturing Processes, Material Forming.
- + **Padavic, Irene**, Ph.D., 1987, Michigan; Professor of Sociology, College of Social Sciences. Fields: Gender, Work, Social Stratification, Family.
- + **Palanki, Srinivas**, Ph.D., 1992, Michigan; Professor of Chemical Engineering, College of Engineering. Fields: Developing Process Analysis, Optimization and Control of Batch Reactors Research.
- + **Palmer, Barbara C.**, Ph.D., 1972, Florida State; Professor of Elementary and Early Childhood Education and Practice. Fields: Diagnosis/Correction of Reading Disabilities, Adult Literacy.
- + **Panton, Lynn B.**, Ph.D., 1993, University of Florida. Assistant Professor of Nutrition, Food and Exercise Sciences. 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.
- + **Paradise, David B.**, Ph.D., 1986, Texas Tech; Chair and Professor of Information Management Sciences. 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.
- + **Park, Young-Bin**, Ph.D., 2003, Georgia Tech, Assistant Professor, Industrial Engineering. Fields: Multifunctional composites and nanocomposites, carbon nanotubes, advanced materials processing technologies, fracture mechanics and fatigue, failure analysis and prevention, and reliability engineering. .
- + **Parker, William C.**, Ph.D., 1983, University of Chicago. Associate Chair and Associate Professor of Geological Sciences. Fields: Marine Paleocology, Carbonate Petrology.
- + **Parkinson, William A.**, Ph.D., 1999, Michigan; Assistant Professor of Anthropology. Fields: Prehistoric Archaeology of Central/Eastern Europe and the Balkans.
- * **Parks, John W., IV**, D.M.A., 2001, Eastman School of Music; Assistant Professor, School of Music. Fields: Percussion Performance/Literature.

- + **Pasley, Beatrice K.**, Ed.D., 1974, Indiana University; Professor and Chair, Family and Child Sciences, College of Human Sciences. Fields: Marital process in remarriage and stepfamilies; fathering post-divorce; father identity and involvement; best practices in family mediation, divorce education, and relationship development.
- * **Patenaude, Elizabeth W.**, M.F.A., Chair and Professor of Dance. Fields: Contemporary Dance Technique and Choreography.
- * **Paterson, Jeffrey S.**, Ph.D., 1995, Georgia; Associate Professor of Accounting. Field: Tax.
- * **Patterson, Frank M., III**, M.A., 1987, Baylor University; Professor and Dean, School of Motion Picture, Television and Recording Arts. Fields: Producing, Screenwriting, Directing.
- * **Pekurny, Robert G.**, Ph.D., 1977, Minnesota; Associate Professor of Communication. Fields: Screenwriting, Television Production, Television Industry Studies.
- * **Perkins, Jon D.**, Ph.D., 2003, Illinois at Urbana-Champaign; Assistant Professor Accounting, College of Business. Fields: Behavioral accounting.
- + **Perpener, John O., III**, Ph.D. 1992, New York University. Associate Professor of Dance. Fields: Dance History and Theory Research.
- + **Perrewe, Pamela L.**, Ph.D. 1985, University of Nebraska. Distinguished Research Professor, 2003-2004, and Professor of Management. Fields: Organization Behavior, Job Stress, Task Design.
- + **Perry, Reginald J.**, Ph.D. 1989, Georgia Institute of Technology. Chair and Professor of Electrical and Computer Engineering. Fields: CMOS Digital and Analog Circuit Design, DRAM/SRAM Memory Cell Development, Radiation Effects in DRAM/SRAM Arrays, MOS Device Design and Modeling.
- + **Peters, Elizabeth H.**, Ph.D. 1982, University of Florida. Associate Professor of Anthropology. Fields: Physical Anthropology, Primatology, Communication, Behavioral Evolution.
- + **Peterson, David R.**, Ph.D. 1981, University of North Carolina at Chapel Hill. Professor of Finance. Field: Investments.
- + **Peterson, Gary W.**, Ph.D. 1970, Duke University. Professor of Human Services and Studies, and Associate Dean, College of Education. Fields: Personality Assessment, Cognitive Development, Consulting.
- + **Peterson, Janet S.**, Ph.D. 1981, University of Tennessee at Knoxville. Professor of Mathematics. Fields: Numerical PDE.
- * **Peterson, William F.**, M.M. Associate Professor of Music. Fields: Composition, Jazz Keyboard Performance.
- + **Pfaff, Christopher A.**, Ph.D. 1992, Institute of Fine Arts. Associate Professor of Classics. Fields: Greek Art and Archaeology.
- + **Pfeiffer, Steven I.**, Ph.D., 1977, North Carolina; Professor of Educational Psychology, College of Education. Fields: Socio-emotional Needs of the Gifted, Test Development and Validation; Emotional Intelligence.
- * **Phillips, Patricia H.**, M.F.A., Professor of Dance, School of Visual Arts and Dance Field: Reconstruction Notation.
- + **Piazza, Carolyn L.**, Ph.D. 1981, University of Pittsburgh. Associate Professor of Educational Theory and Practice. Fields: Language and Literacy Education, Written Composition.
- + **Picart, Caroline Joan S.**, Ph.D. 1996, Penn State University. Associate Professor of English. Fields: Literature and Philosophy, Film, Critical Theory and Women's Studies.
- + **Piekarewicz, Jorge**, Ph.D. 1985, University of Pennsylvania. Associate Professor of Physics. Fields: Theoretical and Computational Nuclear Physics.
- * **Pietralunga, Mark F.**, Ph.D. 1983, University of California at Berkeley. Victor Oelschlager Professor of Modern Languages, 2000, and Chair of Modern Languages and Linguistics. Field: Twentieth - century Italian Novel.
- + **Pignatiello, Joseph J., Jr.**, Ph.D. 1982, Ohio State University. Associate Professor of Industrial Engineering. Field: Industrial Engineering.
- + **Ping, Wei-Chou Virgil**, Ph.D., 1989, University of Texas Professor of Civil and Environmental Engineering. Fields: Materials, Pavement and Transportation Engineering.
- + **Plant, Elizabeth Ashby**, Ph.D. 2000, University of Wisconsin. Assistant Professor of Psychology. Fields: Social Psychology with a Focus on Prejudice and Stereotyping.
- + **Poey, Delia M.**, Ph.D. 1996, Louisiana State University. Assistant Professor of Modern Languages and Linguistics. Field: Comparative Literature.
- + **Pohl, Mary E.**, Ph.D. 1977, Harvard University. Professor of Anthropology. Fields: Mesoamerican Archaeology, Ethnozoology.
- + **Pompper, Donnayn**, Ph.D. 2001, Temple University. Associate Professor of Communication. Fields: Critical/Cultural Studies, Social Risk, Feminist Studies.
- * **Porter, Marcia D.**, D.M.A., 2002, Michigan; Assistant Professor of Music. Fields: Voice Performance/Literature.
- + **Porterfield, Amanda**, Ph.D., 1975, Stanford; Visiting Professor of Religion, College of Arts and Sciences. Fields: American Religious History.
- * **Portman, Richard R.**, Gordon Sawyer Professor of Recording Arts, 1999, and Associate in Film, School of Motion Picture, Television, and Recording Arts Film Sound Design.
- Powell, David F.**, J.D. 1972, Texas; LL.M., 1973, New York University; Associate Professor of Law. Fields: Property, Gratuitous Transfers, Estate and Gift Tax.
- + **Prevatt, Frances A.**, Ph.D. 1985, University of Virginia. Associate Professor of Human Services and Studies. Fields: School Psychology, Learning Disabilities.
- Priester, Benjamin J.**, J.D., 1998, Duke; Assistant Professor of Law. Fields: Criminal Law, Constitutional Law, Federal Criminal Procedure.
- + **Proctor, Briley E.**, Ph.D. 1999, University of Florida. Visiting Assistant Professor of Human Services and Studies. Fields: Learning Disabilities in College Students and Adults; Psycho-educational Assessment; Academic Interventions.
- * **Proffitt, Jennifer**, Ph.D., 2005, Penn State, Assistant Professor, Communication. Fields: political economy of communication, media industries and regulation, history of media.
- + **Prosper, Harrison B.**, Ph.D., 1980, Manchester, Britain. Professor of Physics. Fields: Experimental Physics, Particle Physics.
- + **Pullen, Daniel J.**, Ph.D. 1985, Indiana University. Chair and Associate Professor of Classics. Fields: Classical Archaeology and Bronze Age Archaeology.
- + **Punter, Melanie L.**, Adv. Certificate. 1974. Manhattan School of Music, Associate Professor of Music. Field: Double Bass.
- + **Quadagno, David M.**, Ph.D., 1969, Illinois; Professor of Biological Science. Fields: Neuroendocrinology and human sexuality; intervention strategies for the prevention of HIV infection; determinants of violent behavior in humans.
- + **Quadagno, Jill B.**, Ph.D. 1976, University of Kansas. Professor of Sociology and Mildred and Claude Pepper Eminent Scholar in Social Gerontology. Fields: Aging, Historical Sociology, Political Economy.
- + **Quarterman, Jerome**, Ph.D., 1978, Ohio State University. Associate Professor of Sport Management, Recreation Management and Physical Education. Fields: Organizational Behavior.
- + **Quine, John R.**, Ph.D. 1971, University of Michigan. Charles W. McArthur Professor of Mathematics, 2002. Fields: Complex Analysis, Geometric Function Theory.
- + **Radach, Ralph**, Ph.D., 1995, University of Berlin. Associate Professor, Psychology. Fields: Cognitive and developmental reading research; visual perception, attention and eye movement control.
- + **Rai, Amitabh S.**, Ph.D., 1995, Stanford; Assistant Professor of English, College of Arts and Sciences. Fields: Colonial and Postcolonial Theory, Bollywood Film Studies, Colonial Slavery, Missionary Discourses in Imperial England, 19th-Century Anthropology, Queer Marxisms, Sentiment Studies.
- * **Railey, Michael G.**, Ph.D., 1997, FSU, Assistant Professor, Counseling & Human Systems. Fields: Counseling Psychology.
- + **Ralston, Penny A.**, Ph.D. 1978, University of Illinois. Dean, College of Human Sciences, and Professor of Family and Child Sciences. Fields: Community-based programs for Older Adults; Program Development in Higher Education.
- * **Ramakrishnan, Subramanian**, Ph.D., 2001, Illinois, Assistant Professor, Chemical and Biomedical Engineering. Fields: Colloidal and interfacial science, nanoparticle self assembly, structure-property relationships in soft condensed matter.
- * **Rambo-Roddenberry, Michelle**, Ph.D., 2002, Virginia Tech, Assistant Professor, Civil & Environmental Engineering. Fields: Prestressed concrete, segmental bridges, bridge durability and retrofitting, structural monitoring & emerging materials.
- * **Randeree, Ebrahim**, Ph.D., 2006, University of Buffalo, Assistant Professor, Information Studies. Fields: Medical Informatics.
- + **Randolph, Karen A.**, Ph.D., 1998, North Carolina at Chapel Hill; Assistant Professor of Social Work. Fields: At risk youth; substance use prevention; resilience; academic achievement.
- + **Raney, Arthur A.**, Ph.D. 1998, University of Alabama. Assistant Professor of Communication. Fields: Mass Communication Processes and Effect, Media and Society, Entertainment Theory, Sports and Media, Communication Theory and Research Methods.
- * **Ranft, Annette L.**, Ph.D., 1997, UNC-CH, Assistant Professor, Business Administration. Fields: Merger and Acquisition Integration, Knowledge-based perspectives, Strategic Leadership & Corporate Governance, Human & Social Capital.
- + **Rankins, Jenice**, Ed.D. 1980, Columbia University. Associate Professor of Nutrition, Food, and Exercise Science. Fields: Nutrition Education Interventions in the Community, Interactions of Gender and Nutrition in International Development, Global Education (focus on nutrition resources management).
- + **Rasmussen, David W.**, Ph.D. 1969, Washington University. James H. Gapinski Professor of Economics, 2000, and Dean of Social Sciences. Fields: Urban Economics, Labor Economics.
- + **Ratliffe, Thomas A.**, Ed.D. 1984, Georgia. Associate Professor of Sport Management, Recreation Management and Physical Education. Fields: Administration and Professional Preparation.
- + **Rawling, John P.**, Ph.D. 1989, University of California at Berkeley. Chair and Professor of Philosophy, College of Arts and Sciences. Fields: Decision and Game Theory, Ethics, Logic.
- + **Ray, Peter S.**, Ph.D. 1973, Florida State University. Professor of Meteorology, and Faculty Associate, School of Computational Science and Information Technology. Fields: Remote Sensing, Numerical Modeling of Mesoscale Processes, Severe Storms and Cloud Dynamics.
- + **Rayburn, Jay D.**, Ph.D. 1977, Florida State University. Associate Professor of Communication. Fields: Public Relations, Uses and Gratifications of Mass Media, Audience Analysis, Media Effects, Mass Media Law.
- + **Readdick, Christine A.**, M.S. Associate Professor of Family and Child Sciences. Fields: Early Childhood/Adolescent Development, Early Childhood Pedagogy, Sibling/Non-Sibling Caregiving.
- + **Reardon, Robert C.**, Ph.D. 1968, Florida State University. Professor of Human Services and Studies, and Director, Career Placement Center. Fields: Development and Evaluation of Life Career Planning Programs for Youth and Adults.
- + **Reasor, Paul D.**, Ph.D., 2000, Colorado State; Assistant Professor of Meteorology, College of Arts and Sciences. Fields: Dynamic Meteorology, Tropical Cyclones, Radar Meteorology.
- * **Reenock, Christopher M.**, Ph.D., 2001, Pennsylvania State; Visiting Assistant Professor of Political Science, College of Social Sciences. Fields: Public Policy, Comparative Politics.
- + **Reeves, Robert H.**, Ph.D. 1969, New York University. Associate Professor and Associate Chair of Biological Science. Fields: Bacterial and Phage Genetics, RNA Structure and Function, Translational Suppression.
- + **Reglero, Lara**, Ph.D., 2004, Connecticut, Assistant Professor, Modern Languages. Fields: Linguistics (Syntax).

- + **Rehm, Marsha L.**, Ph.D. 1987, University of Minnesota. Associate Professor of Family and Child Sciences. Fields: Family and Consumer Sciences Education, Aesthetic Aspects of Family Life, Vocational Development.
- + **Reid, Sue Titus**, Ph.D. 1965, University of Missouri-Columbia; J.D. 1972, University of Iowa College of Law. Professor of Public Administration and Policy. Fields: Torts, Criminology, Criminal Justice.
- + **Reina, Laura**, Ph.D. 1992, International School for Advanced Studies. Associate Professor of Physics. Fields: Phenomenology of Particle Physics.
- + **Reiser, Robert A.**, Ph.D. 1975, Arizona State University. Professor of Educational Research, Distinguished Teaching Professor, 1999-2000. Fields: Individualized Instruction, Mastery Learning, Media Research.
- + **Reisig, Michael D.**, Ph.D. 1996, Washington State; Associate Professor, School of Criminology and Criminal Justice. Fields: policing, corrections, and female criminality.
- * **Reynaud, Barbara C.**, Ph.D. 1998, Florida State University. Assistant in Sport Management, Recreation Management and Physical Education. Fields: Sport Administration, Coaching.
- + **Reynolds, John R.**, Ph.D. 1997, Ohio State University. Associate Professor of Sociology, College of Social Sciences. Fields: Social Stratification, Research Methodology, Stats, Medical Sociology, Multiple Regression.
- + **Riccardi, Gregory A.**, Ph.D. 1980, State University of New York; Professor of Computer Science and Scholar/Scientist, School of Computational Science and Information Technology. Fields: Supercomputer Programming, Parallel Processing, Software Engineering, Operating Systems.
- + **Rice, Diana C.**, Ph.D. 1990, Indiana University. Assistant Professor of Elementary and Early Childhood Education and Practice. Field: Elementary Science Education.
- * **Richard, Valliere T.**, Ph.D., 1989, Florida State; Associate Professor of Motion Picture, Television, and Recording Arts. Fields: Computer Animation History, Screenwriting, Documentary Film, African American Artists, African American History.
- * **Richey, Michael M.**, Ph.D. 1975, Florida State University. Professor of Theatre. Field: Acting.
- + **Rikvold, Per Arne**, Ph.D. 1983, Temple University. Professor of Physics and Scholar/Scientist, School of Computational and Information Technology. Fields: Theoretical Physics; Condensed-matter Physics, Surface and Interface Science, Computational Physics.
- + **Riley, Mark A.**, Ph.D., 1985, University of Liverpool. Raymond K. Sheline Professor of Physics, 2001. Fields: Experimental Physics, Nuclear Structure Physics.
- + **Rill, Randolph L.**, Ph.D. 1971, Northwestern University. Professor of Biomedical Sciences. Fields: Biochemistry.
- * **Roberson, Keith A.**, M.F.A. Associate Professor of Art, School of Visual Arts and Dance. Fields: Digital Arts, Interactive Sculpture, Virtual Reality, Digital Video.
- + **Roberts, John R.**, Ph.D., 2002, North Carolina at Chapel Hill; Visiting Assistant Professor of Philosophy, College of Arts and Sciences. Fields: Modern Philosophy, Moral Psychology, Philosophy of Mind.
- + **Roberts, Rodney G.**, Ph.D. 1992, Purdue University. Associate Professor of Electrical and Computer Engineering. Fields: Control Systems and Robotics.
- + **Roberts, Thomas M.**, Ph.D. 1976, University of Notre Dame. Robert B. Short Professor of Biological Science, 2002, and Chair of Biological Science. Field: Cell Biology.
- + **Roberts, Winston**, Ph.D, University of Guelph, Professor, Physics. Fields: Nuclear physics; properties of hadrons.
- * **Roche, James W.**, M.F.A. Professor of Studio Art. Field: Sculpture.
- + **Roehrig-Bice, Alysia D.**, Ph.D., 2003, Notre Dame; Visiting Assistant Professor and Assistant Program Director, Learning Systems Institute, Program Development/Faculty Support. Fields: Teachers Professional Development, Knowledge & Classroom Practices Related to Student Motivation and Literacy Learning.
- + **Rogachev, Grigory**, Ph.D., 1999, Russian Research Center, Assistant Professor, Physics. Fields: Experimental nuclear physics, in particular, the structure of exotic neutron-rich and neutron-deficient isotopes, reactions with Radioactive Nuclear Beams, cluster states in light nuclei and mechanism of nuclear reactions.
- + **Rogers, Nancy**, Ph.D., 2000, Rogers, Assistant Professor, Music Theory. Fields: Music Theory.
- * **Roman, Mary Brigid**, M.M. Associate Professor of Music. Fields: Harp Performance, Class Piano.
- * **Romanchuk, Robert L.**, Ph.D. 1999, University of California at Los Angeles. Assistant Professor of Modern Languages and Linguistics. Fields: Early Slavic and Byzantine Literature and Culture, Monastic Culture, Medieval Hermeneutics.
- + **Roper, Michael G.**, Ph.D., 2003, University of Florida. Assistant Professor Chemistry. Fields: analytical chemistry, bioanalytical chemistry, microfluidics, bioassays.
- + **Rosal, Marcia L.**, Ph.D. 1986, University of Queensland. Professor of Art Education, School of Visual Arts and Dance. Fields: Efficacy of Art Therapy, Use of Art Therapy with Various Populations.
- Rossi, James E.**, J.D., 1991, Iowa; LL.M., 1994, Yale; HARRY M. WALBORSKY Professor of Law and Associate Dean for Research. Fields: Torts, Administrative Law, Antitrust, State Administrative Procedure, Energy Law and Policy.
- + **Roux, Kenneth H.**, Ph.D. 1974, Tulane University. Professor of Biological Science. Fields: Molecular Immunology, Immunogenetics, Immunochimistry.
- + **Rowe, Anne E.**, Ph.D. 1973, University of North Carolina at Chapel Hill. Professor of English, Dean of the Faculties, and Deputy Provost. Field: Literature of the American South.
- * **Rowell, David**, MFA, 1993, Alabama, Assistant Professor, Theatre. Fields: Theatre Management.
- * **Rubini, Gail**, M.F.A. Associate Professor of Art. Fields: Photography, Glass, Business.
- * **Rudd, Andy**, Ph.D., 1998, Idaho, Assistant Professor, Physical Education. Fields: Sport Ethics, Character Development in Sport, Ethics in Sport Management, Instrument Development, and Mixed-Methods Research.
- Ruhl, John B.**, J.D., 1982, Virginia; LL.M., 1986, George Washington; Ph.D., 2006, Southern Illinois; Matthews & Hawkins Professor of Property. Fields: Property, Land Use, Environmental Law, Administrative Law, Endangered Species Protection, Ecosystem Management.
- * **Ruiz, Marilyn O.**, Ph.D. 1995, University of Florida. Assistant Professor of Geography. Fields: Geographical Information Studies, Medical Geography.
- + **Ruscher, Paul H.**, Ph.D. 1987, Oregon State University. Associate Professor of Meteorology. Fields: Synoptic and Mesometeorology, Boundary Layer Processes.
- + **Ruse, Michael E.**, Ph.D. 1970, University of Bristol. Professor of Philosophy. Fields: Philosophy of Biology (especially Darwinism), Ethics, History and Philosophy of Science.
- * **Rutkovsky, Paul**, M.F.A. Associate Professor of Studio Art. Field: Electronic Media.
- + **Rutledge, Stacey A.**, Ph.D. 2004, University of Chicago. Assistant Professor, Educational Leadership and Policy Studies, College of Education. Fields: Ed. Accountability, School reform, Sociology of Education, Urban Ed. Qualitative Research Methods.
- + **Ryan, Pamela L.**, M.A. Associate Professor of Music. Fields: Viola Performance, String Pedagogy and Literature.
- + **Ryan, Scott Douglas**, Ph.D. 2000, Case Western Reserve University. Assistant Professor of Social Work. Fields: Child Welfare/Adoptions, Impact of AIDS on the Families, Play Therapy.
- + **Rykin, Dmitry**, Ph.D., 2006, CERGE-EI, Assistant Professor, Economics.
- + **Safron, Sanford A.**, Ph.D. 1969, Harvard University. Professor of Chemistry and Biochemistry. Fields: Dynamics of Chemical Reactions, Models of Chemical Reactions, Dynamics of Crystal Surfaces, He Atom-Surface Scattering Experiments.
- + **Saladin, Linda A.**, Ph.D. 1985, University of California at Irvine. Associate Professor of English. Fields: Literary Theory, Gender Studies.
- + **Salmon, Tim C.**, Ph.D. 1999, John Hopkins. Assistant Professor of Economics. Fields: Game Theory, Auction Theory, Experimental Economics.
- + **Salters, Vincent**, Ph.D., 1989, MIT, Associate Professor Geological Sciences. Fields: Geochemistry, Trace Element and Isotope Geochemistry.
- + **Saltiel, Jack**, Ph.D. 1964, California Institute of Technology. Professor of Chemistry and Biochemistry. Fields: Photochemistry of Organic Molecules, Elucidation of the Mechanisms of Photochemical Reactions by Chemical and Spectroscopic Means.
- + **Sampson, James P., Jr.**, Ph.D. 1977, University of Florida. Professor of Human Services and Studies. Fields: Computer Applications in Counseling, Career Decision-making and Career Services.
- + **Sandahl, Carrie E.**, Ph.D. 1997, University of Wisconsin at Madison. Assistant Professor of Theatre. Fields: Feminism, Postmodernism, Disability Studies, Cultural Studies, Nineteenth - century Popular Performance.
- + **Sanders, Joe E.**, MFS, 1986, Arizona State, Professor, Art History.
- * **Sandifer, James R.**, B.A. Associate Professor of Dance. Fields: Dance Theatre Production and Design.
- + **Sang, Qing-Xiang**, Ph.D., 1990 Georgetown; Associate Professor, Chemistry and Biochemistry, College of Arts and Sciences. Fields: Protein Chemistry, Enzymology, Molecular Biology, and Biochemistry of Metalloproteinases; Biochemical Basis of Angiogenesis; Molecular Carcinogenesis and Mechanisms of Cancer Invasion and Metastasis; Bioanalytical Chemistry and Proteomics of Biomarkers for Cancer and Cardiovascular Diseases.
- + **Sapolsky, Barry S.**, Ph.D. 1977, Indiana University. Professor of Communication. Fields: New Communication and Information Technologies, Survey Research, Mass Communication Theory and Effects.
- + **Sass, Tim R.**, Ph.D., 1984 University of Washington. Associate Professor of Economics. Fields: Microeconomics, Industrial Organizations, Public Choice.
- + **Sathe, Shridhar**, Ph.D. 1981, Utah State University. Distinguished Teaching Professor, 2002-2003, D.K. Salunkhe Professor of Food Science, 2001, and Professor of Nutrition, Food and Exercise Sciences. Fields: Physicochemical and Nutritional Aspects of Food Chemistry with Emphasis in Protein Biochemistry.
- + **Sauer, Gregory**, M.M., 1988, New England Conservatory, Associate Professor, College of Music. Fields: Cello Performance.
- + **Schatschneider, Chris W.**, Ph.D., 1995 Case Western Reserve; Associate Professor of Psychology. Fields: Development of Reading Skills, Research Design and Quantitative Methods.
- + **Schlagenhauf, Don E.**, Ph.D. 1977, University of Illinois. Professor of Economics and Rod and Hope Brim Eminent Scholar in Economics. Fields: Macroeconomics, Applied Economics and Forecasting, International Monetary Theory and Policy.
- + **Schlenoff, Joseph**, Ph.D. 1986, University of Massachusetts, Amherst. Professor of Chemistry and Biochemistry. Fields: Synthesis and Characterization of Electrically Conductive Polymers and Ceramics, Electrochemical Polymerization Properties of Superconducting Oxides.
- + **Schlottmann, Pedro U. J.**, Ph.D., 1973 Munich. Professor of Physics. Field: Theoretical Condensed Matter Physics.
- + **Schmertmann, Carl P.**, Ph.D., 1988, University of California at Berkeley. Professor of Economics, College of Social Sciences. Field: Demography.
- * **Schmidt, Heike**, Ph.D., 1996, Oxford, Asst. Prof., History.

- + **Schmidt, Norman B.**, Ph.D., 1991, Texas; Professor of Psychology, College of Arts and Sciences. Fields: Anxiety Pathology.
- + **Scholz, John T.**, Ph.D. 1977, University of California at Berkeley. Francis Eppes Professor of Political Science. Fields: Public Policy and Administration, Political Economy, Governance.
- * **Schrader, Linda B.**, Ph.D. 1992, Florida State University. Assistant Professor of Educational Leadership and Policy Studies. Fields: Program Evaluation, Qualitative Methods, Service Learning.
- + **Schrock, Douglas P.**, Ph.D. 2001, North Carolina State University. Assistant Professor of Sociology. Fields: Emotions, Race/Class/Gender, Qualitative Methodology.
- + **Schwartz, Justin**, Ph.D., 1990, Massachusetts Institute of Technology. Associate Program Director, National High Magnetic Field Laboratory, and Professor of Mechanical Engineering. Fields: Magnetic Engineering, Superconductors, Bulk Processing, Fluxpinning Mechanisms and Irradiation Effects, Nuclear Engineering.
- + **Schwartz, Robert A.**, Ph.D. 1990, Indiana University. Associate Professor of Educational Leadership. Fields: Higher Education, Student Affairs.
- * **Seaton, Gayle**, D.M. 1985, Florida State University. Program Director, Music. Field: Music Theatre.
- + **Seaton, S. Douglass**, Ph.D. 1977, Columbia University. Warren D. Allen Professor of Music, 2002. Fields: Musicology, Music Literature.
- + **Seel, Norbert**, Ph.D., 1979, University of Saarland, Professor, Instructional Systems. Fields: Learning Systems, Technology, Instruction, Cognition & Learning.
- + **Seidenfeld, Mark**, J.D. 1983, Stanford; Patricia A. Dore Professor of Administrative Law. Fields: Administrative Law, Constitutional Law, Environmental Law, Law and Economics, Telecommunications Law.
- * **Semykina, Anastesa**, Ph.D., 2006, Michigan State Univ., Assstabt Professor, Economics.
- + **Seppala, Mika K.**, Ph.D. 1978, Helsinki. Professor of Mathematics. Fields: Symbolic Computation; Analytic and Algebraic Geometry.
- + **Shaffel, Matthew R.**, Ph.D. 2000, Yale University. Assistant Professor of Music. Field: Music Theory.
- + **Shaheen, Shahid A.**, Ph.D. 1985, Ruhr-Bochum. Associate Professor of Physics. Fields: Experimental Physics, Superconductivity, Magnetism, Materials Science.
- * **Shanbhag, Sachin**, Ph.D., 2004, Michigan, Assistant Professor, Chemical & Biomedical Engineering. Fields: Polymer rheology, topology of polymeric networks, multiscale modeling, computational modeling for tissue engineering and materials applications.
- + **Sharpe, Peggy L.**, Ph.D., 1981, New Mexico; Professor and Chair, Modern Languages, College of Arts and Sciences. Fields: Portuguese Literature and Culture.
- + **Shepherd, Lois L.**, J.D., 1987, Yale; D'Alemberte Professor of Law. Fields: Contracts, Health Law and Policy, Professional Responsibility, Bioethics and the Law.
- + **Shih, Chiang**, Ph.D., 1988, University of Southern California. Professor and Chair of Mechanical Engineering. Fields: Unsteady Aerodynamics, Turbulent Shear Flows, Laser Diagnostics, Instrumentation in Fluid Mechanics.
- + **Shinn, Christopher A.**, Ph.D. 2000, University of California at Santa Cruz. Assistant Professor of English. Fields: Asian American, African American, and Latino/-a Literatures, Cultural and Postcolonial Studies, Critical Race Theory.
- + **Showalter, Michael J.**, Ph.D. 1976, Ohio State University. Professor of Marketing. Fields: Operations Management, Management Science, Materials Management.
- + **Sickinger, James P.**, Ph.D., 1992, Brown University. Associate Professor of Classics. Fields: History, Literature and Oratory of Athenian Society, 500-300 BCE.
- * **Siebert, Darcy C.**, Ph.D., 2001, University of North Carolina; Assistant Professor of Social Work. Fields: Professional Issues, Social Work Services in the Workplace, Technology in Social Work Practice and Research, Alcohol and Other Drug Use, Role Identity Theory.
- + **Simon, Robin W.**, Ph.D., 1992, Indiana; Associate Professor of Sociology, College of Social Sciences. Fields: Mental Health, Emotions, Social Psychology.
- + **Simpson, James**, Ph.D. 1995, Arizona State University. Associate Professor of Industrial Engineering. Fields: Applied Probability and Statistics, Operations Research, Production and Operations Management, Simulation Modeling and Analysis, Quality and Reliability Engineering, Quality Management.
- + **Singh, Bawa Satinder**, Ph.D. 1966, University of Wisconsin. Professor of History. Field: India.
- + **Sinke, Suzanne M.**, Ph.D. 1993, University of Minnesota. Associate Professor of History. Fields: Immigration, Migration, Women's History.
- + **Sirmans, George Stacy**, Ph.D., 1980, University of Georgia. Professor of Risk Management/Insurance, Real Estate and Business Law e. Field: Real Estate Financ.
- + **Slaveva-Griffin, Svetoslava E.**, Ph.D. 2000, University of Iowa. Assistant Professor of Classics. Fields: Late Greek Philosophy, Neoplatonism, Literary Tradition, Development of Literary Expression of Philosophical Concepts.
- + **Smith, Dale L.**, Ph.D. 1987, Massachusetts Institute of Technology. Chair and Associate Professor of Political Science. Fields: International Politics, Statistical Analysis, Computer Techniques, Model Building.
- + **Smith, Thomas E.**, Ph.D. 1982, University of Washington. Associate Dean and Professor of Social Work. Fields: Mental Health, Substance Abuse, Social Work Research.
- + **Sobanjo, John O.**, Ph.D. 1991, Texas A & M University. Associate Professor of Civil and Environmental Engineering. Fields: Transportation Engineering, Construction.
- + **Sommer, Sally R.**, Ph.D., 1979, New York University. Professor of Dance. Fields: Dance film, theatre; making documentary films.
- + **Song, Kai-Sheng**, Ph.D. 1993, University of California at Davis. Associate Professor of Statistics. Fields: Change-point Problems, Information Theory, Nonparametrics, Modeling, Time Series and Signal Processing.
- + **Southerland, Harold P.**, J.D. 1966, Wisconsin; Associate Professor of Law. Fields: Statutory Interpretation, Conflicts of Laws, Law and Literature, Writing Skills.
- + **Southerland, Sherry A.**, Ph.D. 1994, Louisiana State University. Assistant Professor of Middle and Secondary Education. Fields: Reform and Equity in Science Teaching and Learning, Intersection of Culture and Conceptual Change, Role of Nature of Science in Science Learning.
- + **Souva, Mark A.**, Ph.D., 2002, Michigan State; Assistant Professor of Political Science. Fields: International Relations.
- + **Spainhour, Lisa K.**, Ph.D., 1993, North Carolina State University. Associate Professor of Civil and Environmental Engineering. Fields: Composite Materials, Structural Engineering.
- * **Speake, Dianne L.**, Ph.D. 1986, University of Texas. Professor and Associate Dean of Nursing. Fields: Adult Health, Aging.
- + **Spector, Jonathan**, Ph.D., 1978, Texas-Austin, Professor, Instructional Systems. Fields: Learning Systems, Technology, Instruction, Cognition & Learning, Instructional Technology.
- + **Speer, Kevin G.**, Ph.D., 1988, Massachusetts Institute of Technology; Professor of Oceanography, College of Arts and Sciences. Fields: Deep Ocean Circulation, Observations & Dynamics; Water Mass Formation, Thermocline Flow; Hydrothermal Sources & Circulation.
- * **Spicer, Maria**, Ph.D., 1996, Oklahoma State, Assistant Professor Food & Nutrition.
- + **Srinivasan, Ashok**, Ph.D. 1996, University of California at Santa Barbara. Assistant Professor of Computer Science, College of Arts and Sciences. Fields: Scientific Computing, Applications, Parallel Algorithms, High Performance Computing, Mathematical Software.
- + **Srivastava, Anuj**, D.Sc., 1996, Washington University. Associate Professor of Statistics, College of Arts and Sciences. Fields: Image Understanding, Computational Statistics, Statistical Signal Processing.
- + **St. Laurent, Louis**, Ph.D., 1999, WHOI, Assistant Professor, Oceanography. Fields: Oceanic energy cascade processes, tides and internal tides, linear and nonlinear internal waves, double diffusion, turbulent dissipation.
- + **Stallins, Jon A.**, Ph.D. 2000, University of Georgia. Assistant Professor of Geography. Fields: Biogeography, Global Warming, Environmental Field Methods.
- + **Standley, Jayne M.**, Ph.D. 1976, The Florida State University. Distinguished Research Professor, 2003-2004, and Ella Scoble Opperman Professor of Music, 2000. Field: Music Therapy.
- * **Starks, Brian**, Ph.D., 2005, Indiana, Asst. Prof., Sociology. Fields: Religion and Politics, Inequality and Stratification.
- * **Staton, Jeffrey K.**, Ph.D., Washington in St. Louis; Assistant Professor of Political Science, College of Social Sciences. Fields: Comparative Politics.
- * **Stauber, Alvin**, J.D. 1969, University of North Carolina. Professor of Risk Management/Insurance, Real Estate and Business Law. Fields: Business Law, Consumer Law, Commercial Law.
- + **Steadman, Shariyn C.**, Ph.D. 2004, University of Michigan Visiting Assistant Professor, English Education, College of Education English Education. Fields: Professional Development of Pre-Service and In-Service Educators, The Impact of Non-University Certified Teachers on Educational Settings, Gendered Linguistics in the Classroom, Factors Influencing Success in Adult Basic Education.
- + **Stebleton, Michelle M.**, M.M. 1989, University of Michigan. Associate Professor of Music. Fields: Brass Performance/Literature.
- + **Stefanovic, Branko**, Ph.D. 1991, Florida State University. Assistant Professor of Biomedical Sciences. Field: Biochemistry Molecular Biology.
- + **Steinberg, Phillip E.**, Ph.D. 1996, Clark University. Associate Professor of Geography, College of Social Sciences. Fields: Politics of the Environment, Oceans.
- + **Steinbock, Oliver**, Ph.D. 1993, Georg-August, Gottingen(Germany); Associate Professor of Chemistry and Biochemistry. Fields: Kinetics, Experimental and Theoretical Studies of Nonequilibrium Systems, Chemical Self-organization.
- + **Stepina, Lee P.**, Ph.D. 1981, University of Illinois. Professor of Management. Fields: Human Resource Management, Organizational Behavior, Labor Relations, International Management.
- + **Steppan, Scott J.**, Ph.D. 1995, University of Chicago. Associate Professor of Biological Science. Field: Genetic Processes in the Evolution of Morphological Diversity.
- + **Stern, Nat S.**, J.D. 1979, Harvard; John W. and Ashley E. Frost Professor of Law. Fields: Constitutional Law, Legal History, Supreme Court Role-playing. .
- + **Steurer, Michael**, Ph.D., 2000, Swiss Fed. Inst. of Tech-Zurich, Assistant Professor Electrical & Computer Engineering. Fields: Real-time simulations of power systems System integration of novel power system equipment.
- + **Stevens, Douglas E.**, Ph.D., 1996, Indiana University, Associate Professor, Business Administration. Fields: My research seeks to advance economic theory-building in financial and managerial accounting. My financial accounting research examines the effects of financial information on heterogeneous beliefs of investors and analysts and my managerial accounting research examines organizational control and business ethics.
- * **Stewart, Mary**, M.F.S., 1980, University of Indiana, Professor, Studio Art.
- + **Stiegman, Albert E.**, Ph.D. 1984, Columbia University. Associate Professor of Chemistry and Biochemistry. Fields: Inorganic Chemistry, Materials, Chemical Sensors, Heterogeneous Catalysis.
- + **Stierwalt, Julie A.G.**, Ph.D., 1997, Iowa; Assistant Professor of Communication Disorders. Fields: Dysphagi; Motor Speech Disorders; Cognitive-linguistic Interactions; Medical Speech Pathology; Technology in Higher Education.

- + **Stiffel, Bruce**, Ph.D. 1986, University of North Carolina at Chapel Hill. Professor of Urban and Regional Planning. Fields: Planning Theory, Citizen Participation and Dispute Resolution, Environmental Planning and Natural Resources Management.
- * **Stiles, Wilbur J.**, Ph.D. 1965, Georgia Institute of Technology. Associate Professor of Mathematics. Field: Functional Analysis.
- * **Stoeklin, Sara F.**, Ph.D. 1991, Florida State University. Assistant in Software Engineering, Computer Science. Fields: Software Engineering, Patterns, Formal Specification for Real-time Systems.
- + **Stoltzfus, Nathan**, Ph.D. 1993, Harvard. Associate Professor of History. Fields: Nazi Germany, the Former East Germany, and the Social Political History of Ethnic Germans Following World War II.
- + **Stone, David L.**, Ph.D., 1997, Michigan; Assistant Professor, Classics, College of Arts and Sciences. Fields: Roman Archaeology and History.
- + **Strait, Paul W.**, Ph.D. 1970, Princeton University. Associate Chair and Associate Professor of History. Field: Medieval Europe.
- + **Striegel, Andre M.**, Ph.D., 1996, New Orleans, Asst. Prof., Chem. Fields: Macromolecular separation science.
- + **Strouse, Geoffrey**, Ph.D., 1993, UNC - Chapel Hill, Associate Professor, Chemistry. Fields: materials, bio-physical, inorganic, spectroscopy.
- + **Stuckey-French, Elizabeth C.**, M.F.A., Assistant Professor of English. Field: Creative Writing (fiction).
- * **Stuckey-French, Ned**, Ph.D., 1997, Iowa, Assistant Professor, English.
- * **Stvilia, Besiki**, Ph.D., 2006, University of Illinois-Urbana, Assistant Professor, Information Studies. Fields: Information Quality.
- + **Suarez, Virgilio F.**, M.F.A., Professor of English. Fields: Latino Literature, Twentieth - Century Literature, Latin American Literature, Creative Writing, Drama, Fiction, Non-fiction, Poetry.
- * **Sullivan, Linda M.**, D.S.N., 1994, University of Alabama. Associate Professor and Program Director, School of Nursing. Fields: Maternal/Child Health.
- + **Sullivan, Pauline M.**, Ph.D., 1992, New York; Associate Professor, Textiles and Consumer Sciences, College of Human Sciences. Fields: Out-of-town shopping, hospitality-related retail and sustainable development, small and medium-sized businesses.
- + **Sumners, Dewitt Lee**, Ph.D. 1967, Cambridge University. Professor and Chair of Mathematics, Robert O. Lawton Distinguished Professor, 1997-1998, Distinguished Research Professor 1992-1993. Fields: Knot Theory, Topology of 3- and 4-Manifolds, Application of Topology to Chemistry and Biology.
- + **Sunderman, Gretchen L.**, Ph.D., 2002, Pennsylvania State; Assistant Professor of Modern Languages and Linguistics, College of Arts and Sciences. Fields: Second Language Acquisition, Psycholinguistics, Hispanic Literature, Bilingualism.
- + **Sussman, Mark M.**, Ph.D. 1994, University of California at Los Angeles. Visiting Assistant Professor of Mathematics. Fields: Scientific Computing, Computational Fluid Dynamics.
- * **Sutherland, Mary S.**, Ed.D. 1973, University of Alabama. Professor of Middle and Secondary Education. Fields: Program Development, School Health Education, Health Promotion and Community Development for Senior Citizens and Minorities.
- + **Swofford, David L.**, Ph.D., 1986, Illinois; Francis Epps Professor of Biological Science. Fields: Theory and methodology of model-based phylogenetic inference.
- + **Tabor, Samuel L.**, Ph.D. 1972, Stanford University. Distinguished Research Professor, 2001-2002; Professor of Physics. Fields: Experimental Physics; High-spin States in Nuclei.
- + **Tam, Christopher K. W.**, Ph.D. 1966, California Institute of Technology. Professor of Mathematics and Mechanical Engineering, and Research Associate, Geophysical Fluid Dynamics Institute, Distinguished Research Professor, 1990-1991, Robert O. Lawton Distinguished Professor, 2000-2001. Fields: Aeroacoustics, Jet Noise, Hydrodynamic Stability, Turbulence, Computational Fluid Dynamics.
- + **Tang, Hengli**, Ph.D., 1998, San Diego, Assistant Professor, Biological Science. Fields: The general area of research interest in my lab is virus-host cell interactions concerning human immunodeficiency virus (HIV) and hepatitis C virus (HCV).
- * **Tarpley, James H.**, Ph.D., 2004, Pittsburgh, Assistant Professor, Modern Languages. Fields: 20th Century French Literature.
- + **Tatum, William Jeffrey**, Ph.D. 1986, University of Texas at Austin. Professor of Classics, College of Arts and Sciences (Olivia Nelson Dorman Professor of Classics, 2000). Fields: Latin Literature, Roman History.
- + **Tawfiq, Kamal**, Ph.D., 1986, University of Maryland; Professor of Civil and Environmental Engineering. Fields: Geotechnical Engineering, Soil Dynamics, Geotextiles.
- + **Taylor, Gary**, Ph.D., 1988, Cambridge, Professor, English. Fields: Shakespeare, English Renaissance literature, the history of the book, editing, critical race studies, men's studies.
- + **Taylor, Jeanette E.**, Ph.D. 1999, University of Minnesota. Assistant Professor of Psychology. 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**, Ph.D. 2000, University of Miami. Assistant Professor of Sociology. Fields: Medical Sociology, Mental Health, Social Psychology.
- + **Taylor, Kenneth A.**, Ph.D. 1975, University of California at Berkeley. Clinical Assistant Professor of Biomedical Sciences. Fields: Three-dimensional Electron Microscopy of Macromolecules and Macromolecular Assemblies, Biophysics of Muscle Contraction, Structure of the Cytoskeleton.
- + **Teasley, Martell L.**, Ph.D. 2002, Howard University. Assistant Professor of Social Work. 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.**, Ph.D. 1985, University of Florida. Associate Professor of Chemical Engineering. Fields: Semiconductor Processing, Thermophysical Properties, Critical Phenomena.
- + **Tempone, Raul**, Ph.D., 2002, Royal Inst. of Tech., Assistant Professor Mathematics. Fields: Numerical Analysis, Stochastic Differential Equations.
- + **Tenenbaum, Gershon**, Ph.D. 1982, University of Chicago. Professor of Educational Psychology and Learning Systems. Fields: Measurement and Statistical Analysis, Information Processing and Decision Making, Motivation and Exertion.
- + **Tesón, Fernando**, S.J.D., 1987, Northwestern; LL.M., 1982, Université Libre de Bruxelles; Professor of Law and Tobias Simon Eminent Scholar. Fields: Foreign Relations Law, Law and the Arts, Public International Law, Philosophy of Law, International Human Rights.
- * **Thagard, Norman E.**, M.D. 1977, University of Texas Health Science Center. Director of College Relations, Professor of Electrical and Computer Engineering, and Bernard F. Sliger Eminent Scholar Chair in Engineering. Field: Microelectronic Circuits.
- + **Thistle, David**, Ph.D. 1977, Scripps Institution of Oceanography. Chair and Professor of Oceanography. Field: Organization of Shallow-water Soft-bottom Communities and Deep-sea Benthic Communities.
- + **Thomas, Andre**, D.M.A. 1983, Illinois University. Owen F. Sellers Professor of Music, 1999. Fields: Music Education, Choral Music.
- * **Thomas-Tate, Shurita R.**, Ph.D. 2002, Ohio State University. Assistant Professor, Communication Disorders, College of Communication Communication Science and Disorders. Fields: Language and literacy development & disorders, and phonological disorders cultural and linguistic diversity.
- + **Thompson, Gregory L.**, Ph.D. 1987, University of California at Irvine. Professor of Urban and Regional Planning, College of Social Sciences. Fields: Transportation Planning, Transportation History, Plan Development Methods.
- + **Thyer, Bruce A.**, Ph.D. 1982, University of Michigan. Professor, College of Social Work. Fields: Evidence-based Practice, Evaluation Research, Behavior Analysis, Mental Health, Substance Abuse, Social Work Theory, Practice and Education.
- + **Tice, Dianne**, Ph.D., 1987, Princeton, Professor, Psychology. Fields: Behavioral, motivational, and emotional components of the self.
- * **Tillman, Kathryn H.**, Ph.D., 2003, North Carolina; Assistant Professor of Sociology, College of Social Sciences. Fields: Family, Demography, Race/Ethnic/Minority Relations.
- + **Tomasulo, Frank P.**, Ph.D., 1986, California; Professor and Director of BFA Program, School of Motion Picture, Television and Recording Arts.
- + **Torgesen, Joseph K.**, Ph.D. 1976, University of Michigan. Distinguished Research Professor, 1996-1997, Robert M. Gagne Professor of Psychology and Education, 2000. 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**, Ph.D. 1997, University of Nebraska. Assistant Professor of Communication Disorders. Fields: Fluency disorders, counseling, research methods, childhood communication disorders.
- + **Travis, Joseph**, Ph.D. 1980, Duke University. Professor of Biological Science, Director, Computational Science and Information Technology, and Robert O. Lawton Distinguished Professor, 1996-1997. Fields: Ecological and Population Genetics, Population Biology.
- + **Trombley, Paul Q.**, Ph.D. 1990, University of Oregon. Associate Professor of Biological Science and Associate Professor of Medicine. Fields: Olfaction, Synaptic Physiology and Plasticity, Ion Channel Modulation.
- * **Trujillo, Valeris M.**, M.M., Assistant Professor of Music. Fields: Opera Coaching/Accompanying.
- + **Tschinkel, Walter R.**, Ph.D. 1968, University of California at Berkeley. Distinguished Research Professor, 2002-2003, and Margaret Y. Menzel Professor of Biological Science, 1999. Fields: Social Behavior and Biology of Insects, Chemical Communication.
- + **Tull, James F.**, Ph.D. 1973, Rice University. Professor of Geological Sciences. Fields: Structural Geology, Tectonics.
- + **Tung, Leonard J.**, Ph.D. 1977, Texas Tech. Associate Professor of Electrical and Computer Engineering, Engineering. Fields: Fault Analysis for Digital Systems, Multivariable Control Systems, Decentralized Control Systems, Artificial Neural Systems.
- + **Turner, Jeannine**, Ph.D. 1998, University of Texas at Austin. Assistant Professor, Educational Psychology, College of Education Educational Psychology. Fields: Educational Psychology, Students' and Teachers' Emotions, Motivations, and Learnings, Self-regulation and Resilience in Goal-striving, Assessment of Learning Processes.
- + **Turner, Robert J.**, Ph.D., 1964, Syracuse; Professor of Sociology. Fields: Mental Health, Medical Sociology, Alcohol and Drugs.
- + **Twiss, Sumner B., Jr.**, Ph.D. 1974, Yale University. Professor of Religion. Fields: Comparative Ethics and Moral Theory, Religion and Human Rights, Comparative Moral and Religious Thought, Philosophy and Theory of Religion.
- + **Tyson, Gary S.**, Ph.D., 1997, California at Davis; Associate Professor of Computer Science, College of Arts and Sciences. Fields: High Performance Memory Systems, Microarchitecture Design including New Processor Design for Low Power Application Specific Processors.
- * **Ueno, Koji**, Ph.D., 2004, Vanderbilt, Assistant Professor, Sociology. Fields: Social Networks, Mental Health, Sexuality.
- + **Underwood, Nora C.**, Ph.D., Duke; Assistant Professor of Biological Science. Fields: Spatial and temporal population dynamics, ecology and evolution of plan-insect interactions, induced resistance.
- + **Upchurch, Charles J., Jr.**, Ph.D., Rutgers; Assistant Professor of History, College of Arts and Sciences. Fields: Britain, British Empire, Gender and Sexuality.

- + **Uzendoski, Michael A.**, Ph.D., Virginia; Assistant Professor of Anthropology. Fields: Social and Symbolic Anthropology, Political Anthropology, The Anthropology of Religion, Gender, Kinship, Hierarchy, Anthropology and History, Economic Anthropology, Ethnopoetics and Anthropological Linguistics; Amazonia, Andes, Ecuador.
- + **Van Dommelen, Leonard L.**, Ph.D. 1981, Cornell University. Professor of Mechanical Engineering, and Scholar/Scientist, School of Computational Science and Information Technology. Fields: Computational and Theoretical Fluid Mechanics, Numerical Methods.
- Van Doren, John W.**, LL.B., 1959, Yale; Professor of Law. Fields: Family Law, Property, Jurisprudence, Critical Legal Theory.
- + **Van Engelen, Robert A.**, Ph.D. 1998, Leiden University-Netherlands. Associate Professor of Computer Science, College of Arts and Sciences. Fields: Problem-solving Environments, High Performance Computing, Probabilistic and Causal Networks, Knowledge-based Systems, Logic Programming.
- + **Van Hoesj, Mark**, Ph.D. 1996, University of Nijmegen. Associate Professor of Mathematics. Fields: Algebraic Geometry, Cryptography, Symbolic Computation.
- * **Van Iddekinge, Chad H.**, Ph.D., 2001, Clemson, Assistant Professor Business Administration. Fields: Staffing, with emphasis on employment interviews and validation research; Job analysis; Research methods.
- + **Van Sciver, Steven W.**, Ph.D., 1976, University of Washington. Professor of Mechanical Engineering and Distinguished Research Professor, 1996-1997, and Program Director, National High Magnetic Field Laboratory. Fields: Cryogenics and Heat Transfer.
- * **Van Weelden, Kimberly D.**, Ph.D. 2000, University of Arizona. Assistant Professor of Music. Field: Music Education.
- + **Van Winkle, David H.**, Ph.D. 1984, University of Colorado. Chair and Professor of Physics. Fields: Experimental Physics: Liquid Crystals, Colloids, Macromolecules.
- * **Vann, David**, M.F.S., 1994, Cornell University, Assistant Professor, Creative Writing.
- * **Verdugo, Kenneth**, M.F.A., 2001, California, Assistant Professor, Theatre. Fields: Theatre Design/Technology.
- + **Villeneuve, Patricia**, Ph.D., 1992, Arizona; Assistant Professor of Art Education, School of Visual Arts and Dance. Fields: Art Museum Education, Inquiry-Based Art Education.
- + **Vinton, Linda S.**, Ph.D. 1987, University of Wisconsin; Professor of Social Work. Fields: Aging, Domestic Violence.
- + **Vitkus, Daniel J.**, Ph.D. 1992, Columbia University; Associate Professor of English, Field: Renaissance Literature.
- + **Volya, Alexander S.**, Ph.D., 2000, Michigan State; Assistant Professor of Physics, College of Arts and Sciences. Fields: Theoretical Nuclear Physics; nuclear structure models.
- + **Von Molnar, Stephan**, Ph.D. 1965, California at Riverside. Robert A. Kromhout Professor of Physics, 2001, and Director, Center for Materials Research and Technology. Fields: Strongly Correlated Systems, Magnetism, and Magnetic Semiconductors; Transport and Thermodynamic Measurements; Fabrication and Characterization of Magnetic Nanostructures.
- + **VonGlahn, Denise**, Ph.D. 1995, University of Washington. Associate Professor of Musicology. Fields: Musicology, Twentieth - Century.
- + **Wager, Walter W.**, Ed.D. 1972, Indiana University. Professor of Educational Research. Fields: Computer-based Instruction, Instructional Design Models.
- + **Wagner, Richard K.**, Ph.D. 1985, Yale University. Alfred Binet Professor of Psychology, 1999. Fields: Human Intelligence, Acquisition of Complex Cognitive Skills and Knowledge, Phonological Processing and Reading, Intelligent Tutoring Systems.
- * **Wagoner, Dan**, BS, 1954, University West Virginia, Professor, Dance. Fields: Contemporary Dance & Repertory.
- + **Wahl, Horst D.**, Ph.D. 1969, Vienna. Professor of Physics. Fields: Experimental Physics, Particle Physics.
- * **Wakamiya, Lisa R.**, Ph.D., 2000, UCLA, Assistant Professor, Modern Languages. Fields: Modern Russian Literature.
- + **Waldo, Gordon P.**, Ph.D. 1967, Ohio State University. Service Professor of Criminology and Criminal Justice. Fields: Research Methods, Law and Social Control, Corrections.
- + **Walker, Eric C.**, Ph.D. 1984, University of North Carolina at Chapel Hill. Associate Professor of English, and Distinguished Teaching Professor 1995-1996. Fields: Eighteenth - Century British Literature, Romantic Literature, Scottish Literature.
- * **Walsdorf, Kristie L.**, Ph.D. 2000, Florida State; Assistant Professor of Sport Management, Recreation Management and Physical Education, College of Education. Field: Teacher Education.
- + **Walters, Lori J.**, Ph.D. 1986, Princeton University. Professor of Modern Languages and Linguistics. Fields: French Literature of the Middle Ages and Renaissance, Women's Studies.
- + **Wang, An-I**, Ph.D., 2003, California at Los Angeles; Assistant Professor of Computer Science, College of Arts and Sciences. Fields: File Systems, Optimistic Replication, Performance Evaluation, Ad Hoc Network Routing, Operating Systems, Distributed Systems.
- + **Wang, Hsu-pin**, Ph.D., 1986, Pennsylvania State University. Simon Ostrach Professor of Engineering, 2000, Chair of Industrial Engineering. Fields: Computer Integrated Manufacturing, Integrated Product and Process Design.
- + **Wang, Qi**, Ph.D. 1991, Ohio State University. Professor of Mathematics, College of Arts and Sciences. Fields: Applied Mathematics, Computational Mathematics, Fluid Dynamics.
- + **Wang, Qiaoping**, Ph.D., 2005, Penn State, Assistant Professor Mathematics. Fields: Applied Mathematics, Mathematical Biology, Scientific Visualization and Data Mining.
- + **Wang, Xiaoming**, Ph.D., 1996, Indiana; Associate Professor of Mathematics, College of Arts and Sciences. Fields: Theoretical Nuclear Physics; nuclear structure models.
- + **Wang, Yanchang**, Ph.D., 1997, University of Virginia, Assistant Professor, Biomedical Sciences. Fields: Genetics, Molecular Biology.
- + **Wang, Yang**, Ph.D., 1992, Utah. Associate Professor of Geological Sciences. Fields: Low-temperature Geochemistry, Isotope Geochemistry, Global Change.
- + **Wang, Zuoxin**, Ph.D. 1991, University of Massachusetts. Associate Professor of Psychology. Fields: Neuronal and Hormonal Bases of Social Behavior.
- + **Ward, Cheryl A.**, Ph.D. 1993, Texas A&M University. Assistant Professor of Anthropology. Fields: Nautical Archaeology, Archaeobotany, Eastern Mediterranean Archaeology, Global Seafaring.
- * **Ward, Paul**, Ph.D., 2002, University of Liverpool, Assistant Professor Psychology. Fields: Expert performance and skill acquisition in professional, occupational and sporting domains.
- + **Ward, Susan C.**, Ph.D., 1996, Alabama; Assistant Professor of English, College of Arts and Sciences. Fields: 18th-Century British Literature, Early Women's Fiction, 18th-Century Anglo-Caribbean Literature and Culture.
- + **Warf, Barney L.**, Ph.D. 1985, University of Washington. Chair and Professor of Geography. Fields: Contemporary Issues, World Systems Theory, Urban Geography, Economic Geography.
- + **Warren, Nancy B.**, Ph.D., 1997, Indiana; Assistant Professor of English and Courtesy Professor of Religion, College of Arts and Sciences. Fields: Medieval and Early Modern Literature and Religion, Female Spirituality and Political Conflict, Female Monasticism in Later Medieval England.
- * **Wasko, Molly M.**, Ph.D. 2002, University of Maryland; Assistant Professor of Management Information Systems. Fields: Networks of Practice, Intersection of Strategic Resources and IT, Knowledge Management.
- * **Waxman, Lisa J. Kinch**, M.S. Associate Professor of Interior Design. Fields: Computer-aided Design, Social/Psychological Design Factors.
- + **Weatherly, Georges L.**, Ph.D. 1971, Nova University. Professor of Oceanography. Fields: Deep Ocean Circulation, Turbulence, Sediment Transport.
- + **Weatherspoon, Mark H.**, Ph.D., 2002, South Florida; Assistant Professor of Electrical and Computer Engineering. Fields: Microwave and millimeter-wave measurements, device modeling, noise and noise temperature measurement and modeling, microwave and millimeter wave circuits, MMIC implementation, microwave CAD, wireless sub-system characterization and modeling.
- + **Wegkamp, Marten H.**, Ph.D., 1996, Leiden; Associate Professor of Statistics, College of Arts and Sciences. Fields: Classification, Empirical Process Theory, Function Estimation, Model Selection and Aggregation.
- Weidner, Donald J.**, J.D. 1969, Texas; Dean and Alumni Centennial Professor. Fields: Property, Partnership Tax, Real Estate Transactions, Agency and Partnership.
- + **Weingarden, Lauren S.**, Ph.D. 1981, University of Chicago. Associate Professor of Art History. Fields: 19th - and 20th - Century Art.
- + **Weissert, Carol S.**, Ph.D., 1989, North Carolina; Eminent Scholar Chair of Political Science, College of Social Sciences. Fields: Public Policy, American Politics.
- + **Weissert, William G.**, Ph.D., 1969, Claremont Graduate School; Professor of Political Science, College of Social Sciences. Fields: Public Policy, American Politics.
- + **Wekezer, Jerry W.**, Ph.D. 1974, Technical University of Gdansk. Chair and Professor of Civil and Environmental Engineering. Fields: Structural Mechanics, Transportation Applications.
- * **Welch, Leo G.**, D.M., 1995, Florida State; Professor/Assistant Dean, School of Music. Fields: Music Theory.
- * **Welsh, Thomas M.**, Ph.D., 1985, University of Kansas. Associate Professor of Dance. Fields: Exercise Science and Learning Theory.
- + **Wesson, G. Dale**, Ph.D. 1997, Michigan State University. Visiting Assistant Professor of Chemical Engineering. Fields: Computational Fluid Dynamics (CFD), Turbulence Modeling, Drop Break-up, Phase Change Materials.
- + **Wetherby, Amy**, Ph.D. 1982, University of California, Santa Barbara. Laurel L. Schendel Professor of Communication Disorders, 2000. Fields: Language Development, Language Disorders Diagnosis, Neurological Disorders.
- Wexler, Lesley, J.D.**, 2002, Chicago; Assistant Professor of Law. Fields: Employment Discrimination, Torts, International Law, Laws of War.
- + **Whalley, David**, Ph.D., 1990, Virginia. Professor of Computer Science. Fields: Compilers, Computer Architecture, Performance Evaluation, Realtime Systems.
- * **Whyte, James, IV**, N.D., 2001, Case Western University Assistant Professor of Nursing. Fields: Adult Health.
- + **Wiebe, Christopher R.**, Ph.D., 2002, McMaster University, Assistant Professor, Physics. Fields: Quantum Materials, synthesis of high quality correlated electron materials, research in high magnetic fields, and neutron scattering, x-ray scattering, and muon spin relaxation experiments.
- * **Wiedegreen, Eric**, M.S., 1975, Florida, Professor, Interior Design. Fields: Architecture/Building Systems/Sustainable Design.
- + **Wiedenhoever, Ingo L.**, Ph.D. 1995, University of Cologne. Assistant Professor of Physics, College of Arts and Sciences. Field: Experimental Nuclear Physics, especially Nuclear Astrophysics.
- + **Wiegand, Wayne A.**, Ph.D., 1974, Southern Illinois; Professor of Information Studies. Fields: American library history, print culture history, History of Reading, Library as Place, the Library and Intellectual Freedom.
- + **Wilke, Dina J.**, Ph.D. 2000, University of Wisconsin. Assistant Professor of Social Work. Fields: Alcohol and Drug Abuse Treatment, HIV/AIDS, Domestic Violence, Women's Issues.
- * **Williams, Pat W.**, M.F.A. Professor of Art. Fields: Photo-imaging, Installation, Alternative Processes, African American Studies.

- * **Willstedt, Maia**, Ph.D., 2004, Yale University, Assistant Professor, Modern Languages. Fields: Spanish Middle Ages.
- + **Winegardner, Mark D.**, M.F.A., Janet G. Burroway Professor of English, 2001. Field: Creative Writing.
- * **Wingate, Mark L.**, D.M.A. 1998, University of Texas. Assistant Professor of Music. Field: Theory.
- + **Winn, Alice A.**, Ph.D., 1984, Michigan State University. Associate Professor of Biological Science. Fields: Plant Population Ecology and Evolution.
- + **Wise, Sherwood W.**, Ph.D. 1970, University of Illinois; Lyman D. Toulmin Professor of Geological Sciences, 2001. Fields: Marine Geology, Stratigraphy.
- + **Wolfgang, Charles H.**, Ph.D. 1973, University of Pittsburgh. Professor of Elementary and Early Childhood Education and Practice. Fields: Cognitive Process, Discipline Models, Teacher Education.
- * **Wolfson, Gabriela S.**, Ph.D., 2001, Kentucky; Assistant Professor of Public Administration and Policy, College of Social Sciences. Fields: public financial management, health finance, State Medicaid policy and budget processes.
- + **Wood, Susan**, Ph.D. 1997, University of Florida. Assistant Professor of English Education. Fields: Issues and Trends in Teaching English Language Arts in Middle and High Schools, Critical Literacy, Composition, Reading, Assessment.
- + **Workman, Michael**, Ph.D. 2000 Georgia State Assistant Professor, Information Studies. Fields: Commercial information systems and technology, human-technology-organization interactions, information security.
- * **Wright, Thomas G.**, M.M. Professor of Music. Fields: Piano, Music Literature.
- + **Wulff, Jeanette L.**, Ph.D., 1986, Yale; Assistant Professor of Biological Science. Fields: Marine ecology and biogeography, especially of coastal tropical systems; mutually beneficial associations.
- + **Wynot, Edward D.**, Ph.D. 1970, Indiana University. Professor of History. Fields: East Central Europe, Poland, Russia.
- + **Xiong, Peng**, Ph.D. 1993, Brown University. Associate Professor of Physics. Fields: Condensed Matter Experiment, Mesoscopic Physics, Quantum Fluctuations and Phase Transitions in Reduced Dimensions.
- + **Yancy, Kathleen Blake**, Ph.D., 1983, Purdue, Kellogg W. Hunt Professor of English, President Elect of the National Council of Teachers of English, and Co-Director of the International Coalition on Electronic Portfolio Research. Fields: rhetoric and composition, focusing on writing assessment and the role of digital technology in creating new texts and practices, especially electronic portfolios; the role of transfer in college composition curricula.
- + **Yang, Kaifeng**, Ph.D., 2003, Rutgers; Assistant Professor of Public Administration and Policy, College of Social Sciences. Fields: public management, organizational theory, e-government, citizen participation and trust in government.
- + **Yang, Kun**, Ph.D. 1994, Indiana University. Associate Professor of Physics. Field: Theoretical Condensed Matter Physics.
- + **Yang, Wei**, Ph.D., 2001, SUNY, Assistant Professor, Chemistry. Fields: Theoretical Chemistry; Computational Biophysics; Computational Structural Biology.
- + **Yang, Xiaojun**, Ph.D., 2000, Georgia; Assistant Professor of Geography, College of Social Sciences. Fields: Geographical Information Systems.
- + **Yasinsac, Alec F.**, Ph.D. 1996, University of Virginia. Assistant Professor of Computer Science. Fields: Network Security, Security Protocols, Computer Forensics, Formal Methods, Software Engineering.
- * **Yasuhara, Yoshihiro**, Ph.D., 2003, Penn State, Assistant Professor, Humanities.
- Yetter, John F.**, J.D., 1967, Duquesne, LL.M. 1968, Yale University School of Law. Professor of Law. Fields: Criminal Law and Procedure, Florida Criminal Practice, Antitrust.
- + **Young, Patricia Henry**, M.A. Professor of Dance. Fields: Dance History & Theory, Performance Studies, Cultural Studies.
- + **Yu, Hong-Guo**, Ph.D., 2000, University of Georgia, Assistant Professor Biological Science. Fields: Long-term research goals are to elucidate the molecular mechanism responsible for the formation of the meiotic chromosome architecture and to examine the role chromosome organization plays in safeguarding genomic integrity.
- + **Yu, Xian-Min**, Dr.Sc.H, 1989, University of Heidelberg. Associate Professor, Biomeical Sciences. Fields: Neuroscience, Neurophysiology.
- + **Yuan, Xin**, Ph.D. 1998, University of Pittsburgh. Associate Professor of Computer Science, College of Arts and Sciences. Fields: Computer Networks, Parallel Processing, Compiler, Data Flow Analysis, Compilation Techniques for Distributed Memory Machines, Optical Interconnection Networks, ATM, WDM/TDM Communications.
- + **Zakarian, Armen**, Ph.D., 2001, FSU, Assistant Professor, Chemistry. Fields: Natural Products, Total Synthesis, Development of new reactions.
- * **Zeni, Mary Beth**, ScD 1993, University of Pittsburgh. Assistant Professor, School of Nursing. Fields: Community Health.
- + **Zhang, Chun**, Ph.D., 1993, University of Iowa. Associate Professor of Industrial Engineering. Fields: Computer-aided Manufacturing, Composite Materials.
- + **Zheng, Jian-Ping**, Ph.D. E.E., 1990, State University of New York; Professor of Electrical and Computer Engineering. Fields: Optoelectronic and Energy Storage Devices, Solid State Thin Film Deposition and their Applications.
- + **Zhou, Huan Xiang**, Ph.D., 1988, Drexel; Associate Professor of Physics. Fields: Computational And Experimental Biophysics; Protein Stability Folding; And Protein-Protein Interactions.
- + **Zhu, Fanxiu**, Ph.D., 1995, Wuhan University, Assistant Professor, Biological Science. Fields: Kaposi's sarcoma-associated herpesvirus (KSHV), a newly identified human DNA tumor virus associated with several human malignancies, including Kaposi's sarcoma, primary effusion lymphoma, and multicentric Castleman's disease.
- + **Zhu, Lei**, Ph.D., 2003, NYU, Assistant Professor, Chemistry. Fields: Nucleic Acid Chemistry; Molecular Sensing; Supramolecular Chemistry; Organic Chemistry.
- * **Zollar, Willa Jo**, M.F.A., Nancy Smith Fichter Professor of Dance, 1999. Fields: Contemporary Technique and Performance, Choreography and Directing.
- + **Zou, Xiaolei**, Ph.D. 1988, Institute of Atmospheric Physics. Professor of Meteorology. Fields: 4DVAR Problem, Satellite and Radar Data Assimilation, Cyclone, Target Observations and Physical Parameterization.
- + **Zuehlke, Thomas W.**, Ph.D. 1983, Florida; Associate Professor of Economics. Fields: Econometrics, Monetary Economics.
- + **Zwaan, Rolf A.**, Ph.D., 1992, University of Utrecht, Netherlands Professor of Psychology. 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)

Summers, 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 Graziadei 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 Rosby Professor of Meteorology

Torgesen, Joseph, Ph.D., Michigan; Distinguished Research Professor, 1996–1997, Robert M. Gagne Professor of Psychology 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

Holtom, 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

Berkley, Karen J., Ph.D., Washington; Distinguished Research Professor, 2003–2004, McKenzie Professor and Professor of Psychology

Perewe, Pamela L., Ph.D., Nebraska; Distinguished Research Professor, 2003–2004, and Professor of Management

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

Brooks, James S., Ph.D., University of Oregon; Distinguished Research Professor, 2004–2005, Grace C. and William G. Moulton Professor of Physics, 2002

Chandra, Namas, Ph.D., Texas A&M; Distinguished Research Professor, 2004–2005, Krishnamurty Karamcheti Professor of Engineering, 2000, and of Mechanical Engineering

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

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

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

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

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

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

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

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

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

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

Howard, 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

Everage, Karen Burgess, M.S., Florida State; Distinguished Teaching Professor, 2003–2004, and Associate In Mathematics

Carroll, Pamela S., Ed.D., Auburn; Distinguished Teaching Professor, 2005–2006, Dwight L. Burton Professor of English Education, 2006, and Professor of Middle and Secondary Education

Kirby, David K., Ph.D., Johns Hopkins; Distinguished Teaching Professor, 2006–2007, Robert O. Lawton Distinguished Professor, 2003–2004, McKenzie Professor, 1989, Professor of English

McKENZIE PROFESSORS

Berkley, Karen J., Ph.D., Washington; Distinguished Research Professor, 2003–2004, 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

Anderson, Thomas L., Ph.D., Georgia; Jessie Lovano-Kerr Professor of Art Education, 2003
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 William G. Moulton Professor of Physics, 2002
Bryant, John L., Ph.D., Georgia; Distinguished Research Professor, 1994–1995, Orville G. Harold Professor of Mathematics, 2000
Burnett, William C., Ph.D., Hawaii; Carl Henry Oppenheimer Professor of Oceanography, 2002
Case, Bettye Anne, Ph.D., Alabama; Olga Larson Professor of Mathematics, 2003
Chandra, Namas, Ph.D., Texas A&M; Krishnamurthy 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
Collins, Emmanuel, Ph.D., Purdue; Associate Chair and John H. Seely Professor of Mechanical Engineering, 2003
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

Corrigan, John A., Ph.D., Chicago; Edwin S. Gaustad Professor of Religion, 2000
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
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
Darrow, Alice-Ann, Ph.D., Florida State; Irvin Cooper Professor of Music, 2003
Davis, Lynda J., M.F.A., Nellie-Bond Dickinson Professor of Dance, 2003
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
Dorsey, John, Ph.D., Cincinnati; Katherine Blood Hoffman Professor of Chemistry, 2000
Dresang, Eliza T., Ph.D., University of Wisconsin-Madison; Eliza Atkins Gleason Professor of Information Studies, 2003
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
Falk, Dean, Ph.D., Michigan; Hale G. Smith Professor of Anthropology, 2003, Chair and Professor of Anthropology
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
Florito, 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
Gellately, Robert J., Ph.D., London; Earl Ray Beck Professor of History
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
Goldstein, Howard, Ph.D., Vanderbilt; Donald M. Baer Professor of Communication Sciences and Disorders, 2003, Professor of Communication Disorders
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. Lanutti 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
Hawkins, Hunt, Ph.D., Stanford; James M. McCrimmon Professor of English, 2003, Professor and Chair of English
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
Holton, Robert A., Ph.D., Florida State; Distinguished Research Professor, 1999–2000, and Matthew Suffness Professor of Chemistry, 2000
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
Krishnamurti, Ruby E., Ph.D., California at Los Angeles; J. Stewart Turner Professor of Oceanography, 2003, Professor of Oceanography, and Research Associate, Geophysical Fluid Dynamics Institute
Kroto, Harold W., Ph.D., University of Sheffield; Francis Eppes Professor of Chemistry, 2004, and Nobel Laureate in Chemistry, 1996
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
Manousakis, Efstratios, Ph.D., Illinois at Urbana-Champaign; Donald Robson Professor of Physics, 2003, Professor of Physics, and Scholar/Scientist, Computational Science and Information Technology
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
Muscha, Colleen L., M.F.A., Don Stowell, Jr. Professor of Theatre
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
Ohlsson, Eric P., B.M.Ed., Ohio State; Charles O. DeLaney Professor of Music, 2003
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 Institute of Technology; Distinguished Research Professor, 1996–1997, Carl-Gustaf Rossby Professor of Meteorology, 1999

Pietralunga, Mark F., California at Berkeley; Victor Oelschläger Professor of Modern Languages, 2000, and Chair of Modern Languages and Linguistics

Pohl, Mary E., Ph.D., Harvard University; Laura Jepsen Professor of Anthropology, 2003

Porterfield, Amanda, Ph.D., Stanford; Robery A. Spivey Professor of Religion, 2003, Visiting Professor of Religion, College of Arts and Sciences

Portman, Richard R., Gordon Sawyer Professor of Recording Arts, 1999, and Assistant in Film, School of Motion Picture, Television, and Recording Arts

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

Reiser, Robert A., Ph.D., Arizona State University; Professor of Educational Research, Distinguished Teaching Professor, 1999–2000, Robert M. Morgan Professor of Instructional Systems, 2003

Rikvold, Per Arne, Ph.D., Temple University; James Gust Skofronick Professor of Physics, 2003, Professor of Physics and Scholar/Scientist, School of Computational and Information Technology

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

Schlenoff, Joseph, Ph.D., University of Massachusetts, Amherst; Leo Mandelkern Professor of Polymer Science, 2003, Professor of Chemistry and Biochemistry

Seaton, S. Douglass, Ph.D., Columbia; Warren D. Allen Professor of Music, 2002

Standley, Jayne, Ph.D., Florida State; Distinguished Research Professor, 2003–2004, and 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

Tabor, Samuel L., Ph.D., Stanford University; Distinguished Research Professor, 2001–2002; Norman P. Heydenburg Professor of Physics, 2003, Professor of Physics

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

Turner, Robert J., Ph.D., Syracuse; Marie E. Cowart Professor of Epidemiology and Sociology, 2004, Professor of Sociology

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

Whalley, David, Ph.D., Virginia; E.P. Miles Professor of Computer Science, 2003

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. Mimick Professor of Communication, 2000

Zollar, Jawole Willa Jo, M.F.A., Nancy Smith Fichter Professor of Dance, 1999

Zou, Xiaolei, Ph.D., Institute of Atmospheric Physics; Jule Charney Professor of Meteorology, 2003

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

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

Summers, 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

Standley, Jayne M., Ph.D., Florida State; Distinguished Professor, 2005–2006, Distinguished Research Professor, 2003–2004, and Ella Scoble Opperman Professor of Music, 2000

Marshall, Alan George, Ph.D., Stanford; Distinguished Research Professor, 1998–1999, Kasha Professor of Chemistry 2000

Tschinkel, Walter R., Ph.D., California at Berkeley; Distinguished Research Professor 2002-2003 and Margaret Y. Menzel Professor of Biological Science 1999

NATIONAL ACADEMY OF SCIENCES 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

Gor'Kov, Lev P., Dr.Sc., Ioffe Physical Technical Institute; Leningrad; Professor of Physics, and Program Director, National High Magnetic Field Laboratory

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 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 LAUREATES

Schrieffer, John R., Ph.D., Illinois; Professor of Physics, Nobel Laureate in Physics, 1972

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



INDEX

A

Academic and Professional Program Services 15
 Academic Common Market 29
 academic degree and certificate programs 23
 Academic Program Services 15
 Academic Regulations and Procedures 57
 Accounting, Department of 123
 accreditation, university 18
 Activities Center, Student 72
 administration, university 319
 Admissions, Office of 27
 Academic Common Market 29
 appeal procedure 28
 application 27
 College of Law 31, 96
 College of Medicine 31, 98
 cooperative programs 30
 deadlines 27
 departmental requirements 27
 general policies 27
 health insurance 30
 immunization required 30
 international applicants 27, 30
 non-degree seeking students 29
 Panama City campus 31
 provisional graduate students 28
 readmission 28
 required documents 27
 second graduate program 29
 teacher education 28
 test scores 27
 transcripts 27
 transient and postdoctoral 29
 traveling scholars 29
 Advancement of Procurement, Center for 12
 advising services
 Center for Intensive English Studies 22
 affiliations, university 17
 African-American Studies, certificate in 24
 agency billing 36
 Aging and Public Policy, The Pepper Institute on 125, 213
 Aging Studies, Certificate in 24, 126
 alcohol and drugs
 educational and counseling resources and support 10
 Partnership for Alcohol Responsibility 68
 risks associated with the use of 9
 standards of conduct related to 9
 university disciplinary sanctions for offenses 10
 Alumni Village 43
 Alumni Village Child Development Center 67
 American and Florida Studies, Certificate in 23
 American and Florida Studies, Program in 126
 Anthropology, Department of 127
 apartments 43
 Apparel Design, Certificate in 24
 appeals system, grade 63
 Archaeological Center, Southeast 12, 127
 Archeology Programs in Italy 21
 Archival Studies, Certificate in 23
 Art, Department of 130
 Art, Symposium in the History of 134

Art Education, Department of 131
 Art History, Department of 134
 Arts Administration
 Art Education 132
 Music 103
 Arts Administration, Certificate in 24
 Arts and Community Practice, Certificate in 24, 25, 132
 Arts and Sciences, College of 73
 Asian Studies, Program in 136
 Asolo Theater Company 16, 307
 Assessment Services 68
 assistantships 41
 Associate in Arts, Certificate in 23
 attendance, required 5, 61
 auditor seating privileges 48
 Autism and Related Disabilities, Center for 79, 171

B

Beyond Borders 21, 69
 bicycle parking 70
 Biological Science, Department of 137
 Biomedical Sciences, Program in 140
 Blue Light Trail 70
 Board of Education, State 319
 Board of Governors, Florida 319
 Board of Trustees 319
 Business, College of 75
 Business Administration 76, 214
 Bus Services 69

C

calendar, university 4
 cancellation
 of student schedule by the Registrar 47
 of student schedule by the student 38, 48
 of student schedules for non-payment of tuition, and fees 37, 47
 candidacy, admission to 54
 Career Center 67
 Career Experience Opportunities Program 67
 Career Placement Services 67
 Carnegie Foundation Classification 18
 Center for Academic Retention and Enhancement 69
 Centers, Research and Institutes, listed 14
 certificates
 African-American Studies 24
 Aging Studies 24, 126
 American and Florida Studies 23
 Apparel Design 24
 Archival Studies 23
 Arts Administration 24
 Arts and Community Practice 24, 25, 132
 Associate in Arts 23
 Child Welfare Practice 24
 Church Music 24
 Cognitive Science 23, 164
 College Teaching 23, 24
 Corrections 23
 Critical Theory 23, 202
 Demography 24
 Developmental Disabilities 23
 Digital Video Production 23
 Disaster Recovery 24
 Dispute Resolution 24

Early Childhood/Special Education 23
 Early Childhood and Family Intervention 23
 Early Music 24
 Editing and Publishing 23
 Educational Measurement and Statistics 23
 Educational Policy 24
 Educational Technology 24
 Elementary School Science 23
 Emergency Management 24, 286
 Environmental, Natural Resources, and Land Use Law 24
 Family Social Work Practice 24
 Food Safety, Quality, and Promotion 24
 Health Services Administration and Policy 24, 286
 Hispanic Marketing Communication 23
 Human Performance Technology 24
 Human Resource Development 24
 Human Resource Management 24, 286
 Information Systems Security Professionals 23
 Institutional Research 24
 Interdisciplinary Humanities 23
 International Law 24
 Jazz Studies 24
 Latin American and Caribbean Studies 23
 Law Enforcement 23
 Leadership in Executive and Administrative Development in Social Work 24
 Library Leadership and Management 24
 Marine Biology and Living Resource Ecology 23
 Methods and Policy of Educational Accountability 24
 Museum Studies 23, 24, 25, 90, 94, 115, 132, 135
 Music Education and Leadership 24
 Music of the Americas 24
 Music Therapy Equivalency 24
 Oceanography 23
 Online Instructional Development 24
 Organ/Harpsichord Performance 24
 Pedagogy of Music Theory 24
 Performance, Music 24
 Performance Management 23
 Piano Pedagogy 24
 Political Economy 24
 Program Evaluation 24
 Project Management 23
 Public Administration 24, 286
 Public Financial Management 24, 286
 Real Estate Development 24
 Reference Services 24
 Residential Development 24
 Retail Merchandising 24
 School Library Media Leadership 24
 Security Administration 23
 Special Event Management 23
 Special Music Education 24
 Teaching English to Speakers of Other Languages 23
 Theatre Administration and Management 25
 Underwater Crime Scene Investigation 23
 Urban and Regional Planning 24
 Urban Design 24

Water and Environmental Resources Engineering 24
 Web Design 24
 World Music 24
 Youth Services 24
 changes of schedule 48
 changing of major department 65
 Chemical and Biomedical Engineering, Department of 141
 Chemical Physics, Program in 146
 Chemistry and Biochemistry, Department of 147
 child care 67
 Alumni Village Child Development Center 67
 Educational Research Center for Child Development 67
 Infant and Toddler Child Development Center 67
 Childhood Education 150
 Childhood Education, Reading and Disability Services; Department of 150
 Child Welfare Practice, Certificate in 24
 Chinese (Modern Languages and Linguistics) 254
 Church Music, Certificate in 24
 Circus, Flying High 72
 Civil and Environmental Engineering, Department of 156
 class attendance 61
 Classics, Department of 160
 classification of students 61
 Cognitive Science, Certificate in 23, 164
 Cognitive Sciences, Institute for 164
 colleges 13
 College Teaching, Certificate in 23, 24
 Committee on Student Academic Relations 63
 Communication, College of 79
 Communication, Department of 165
 Communication Disorders, Department of 170, 213
 Communication Research Center 12
 Communication Sciences Laboratory 12
 community and public service opportunities 67
 Community Service Learning Program 41
 Composition (Music) 105
 comprehensive examination (master's degree) 52
 Computational Science, Program in 173
 Computer Science, Department of 175
 Congress of Graduate Students 45, 72
 Conservatory of Professional Actor Training 13, 16
 cooperative programs 30
 Florida Agricultural and Mechanical University 48
 Copy Center 70
 Corrections, Certificate in 23
 Counseling and Human Systems, MS/EdS 194
 Counseling Center, University 68
 Counseling Psychology and School Psychology, Combined Program in 194
 course-type program (master's degree) 51
 course/credit modification 47
 course equivalencies 117
 course examinations 62
 course load 62
 Course Numbering System, Florida's Statewide 117
 course prefix defined 117 listed 118

course requirements
 doctoral 53
 master's 51, 52
 Creative Writing Program 12
 credit
 modification 47
 short courses 65
 transfer and limits 51
 Criminology and Criminal Justice, College of 81, 179
 Critical Theory
 Certificate in 23, 202
 Program in 180
 Curricular/Career Information Services 67
 Czech (Modern Languages and Linguistics) 254

D

Dance, Department of 181
 Dean of Students, Office of 71
 degrees
 application for 56
 clearance for degrees 56
 requirements 51, 53, 54
 degrees offered 23
 Demography, Certificate in 24
 Demography and Population Health, Center for 183
 department billing 36
 Developmental Disabilities, Interdepartmental Certificate in 23
 diagnostic examination, doctoral 53
 Digital Video Production, Certificate in 23
 directed individual study 48
 directory information, request to prevent publication of 61
 disabilities, persons with 5
 Americans with Disabilities Act (ADA) 5
 Student Disability Resource Center (SDRC) 71
 Theodore and Vivian Johnson Adaptive Technologies Lab 71
 Disability Resource Center, Student 71
 Disaster Recovery, Certificate in 24
 dismissal, academic 64
 Dispute Resolution, Certificate in 24
 dissertation 54
 defense 54
 guidelines for release 55
 prospectus 54
 publication of 55
 distance learning 15
 doctoral degree programs 52
 drop/add (changes of schedule) 48
 dual degrees, graduate students
 distinction between dual and joint 51
 regulations 51

E

Early Childhood/Special Education, Certificate in 23
 Early Childhood and Family Intervention, Certificate in 23
 Early Childhood Education 150
 Early Music, Certificate in 24
 Economic Policy and Government, Moore Center for 185
 Economics, Department of 185
 Editing and Publishing, Certificate in 23
 editing services 51
 Education, College of 83

Education, Doctorate in 55
 Educational Leadership and Policy Studies, Department of 187
 Educational Measurement and Statistics, Certificate in 23
 Educational Policy, Certificate in 24
 Educational Psychology and Learning Systems, Department of 191
 Educational Research Center for Child Development 67
 Educational Technology, Certificate in 24
 Electrical and Computer Engineering, Department of 195
 Elementary School Science, Certificate in 23
 Email Accounts, Garnet 9
 Emergency Management, Certificate in 24, 286
 Emotional Disturbances/Learning Disabilities 154
 Engineering, FAMU-FSU College of 87
 English, Department of 199
 English Conversation Club 69
 English Education 244
 English proficiency 27, 31, 53
 English Studies, Center for Intensive 22, 31
 enrollment certification 49
 Environmental, Natural Resources, and Land Use Law, Certificate in 24
 Equal Employment Opportunity and Non-Discrimination Statement 5
 equivalent courses
 authority for acceptance of 117
 exceptions 117
 general rules 117
 estimate of cost, annual 35
 examinations
 comprehensive (master's) 52
 diagnostic (doctoral) 53
 final (course) 62
 extramural sport clubs 71

F

FACTS (Florida Academic Counseling and Tracking for Students) 64
 faculty
 distinguished 340
 faculties 17
 listed 321
 faculty degree candidates 62
 Family and Child Sciences, Department of 203
 Family Educational Rights and Privacy Act (FERPA) 60
 Family Social Work Practice, Certificate in 24
 Federal Work Study Program (FWSP) 41
 fees
 admission deposit 34
 agency billing 36
 appeals committee 37
 application 34, 38
 assessment 34
 cancellation of schedule 37, 38
 course fee charges per credit hour 34
 deferments 37
 delinquent 36
 department billing 36, 40
 duplication/photocopying 34
 estimate of cost, annual 35
 fines and penalties 34
 FSUCard 34
 housing 35, 43
 installment contract 34

instructional 34
 laboratory 35
 late registration 34
 liability 36
 library 35
 loss and damage 35
 mail-in payment 36
 method of payment 35
 new student orientation 34
 refund regulations 38
 reinstatement 37
 replacement FSUCard 34
 return check charge/stop payment charge 34
 standard test 34
 thesis and dissertation 35
 transcript 34
 transportation access 34
 tuition and instructional 34
 veterans' deferments 37
 waivers 37
 fellowships 40
 field placement fitness, guidelines for 64
 Finance, Department of 206
 financial aid 38
 application process 39
 assistantships 41
 check cancellation 40
 deadlines 39
 deferments 40
 delayed delivery loans 40
 eligibility 39
 emergency loans 40
 fees 39
 fellowships 40
 Free Application for Federal Student Aid (FAFSA) 41
 general information 38
 graduate students 39
 loan cancellation and refusals 40
 loan entrance counseling sessions 39
 loan exit interviews 40
 Office of 38
 scholarships 40
 students and fees 39
 withdrawal and return of 38
 first day attendance, required 5
 First Year Experience Program 71
 Florida-Costa Rica Institute (FLORICA) 21
 Florida-France Institute 22
 Florida Agricultural & Mechanical University 48, 87
 Food Safety, Quality, and Promotion, Certificate in 24
 food service 68
 foreign language requirements 52, 53
 foreign students (international) 27, 30
 forgiveness policy 64
 French (Modern Languages and Linguistics) 254
 FSUCard 34
 replacement 34
 full-time student load 62
G
 Geography, Department of 207
 Geological Sciences, Department of 209
 Geophysical Fluid Dynamics, Program in 211
 German (Modern Languages and Linguistics) 255
 Global Ambassadors Program 69
 Global Cafe 69

Global Gatherings 69
 Government Association, Student 71
 grade point average 62
 graduation requirements 55
 transfer credit 51
 grading system 62
 appeals 63
 no grade 62
 practices 63
 graduate degree requirements 51
 graduate education 17
 graduate life 17
 Graduate Record Examinations and Subject Tests 51
 graduate teaching assistant support 45
 graduation of master's and doctoral students 55
 Greek (Classics) 162
 Greek Life, Office of 71
H
 Harold Goldstein Library 91
 Health-Related Programs 213
 health care 68
 Partnership for Alcohol Responsibility (PAR) 68
 Thagard Student Health Center (TSHC) 68
 Health Education Program 213, 246
 health insurance 30, 68, 101, 261
 Health Services Administration and Policy 213, 214, 286
 Health Services Administration and Policy, Certificate in 24
 Higher Education 190
 Hispanic Marketing Communication, Certificate in 23
 History, Department of 215
 History and Philosophy of Science, Program in 218
 History of the University 11
 HIV/AIDS 5
 Holy Days 61
 honor policy, academic
 amendment procedures 59
 appeals 59
 grievance procedure 59
 pledge 57
 policy 57
 policy committee 59
 procedures for resolving cases 57
 sanctions 58
 student rights 57
 violations of 57
 Housing, Office of University 43
 agreement 43
 apartment 43
 applications 43
 costs 35, 43
 Off-Campus Housing Office 43, 72
 Humanities, Program in 219
 Human Performance Technology, Certificate in 24
 Human Resource Development, Certificate in 24
 Human Resource Management, Certificate in 24, 286
 Human Sciences, College of 89
I
 IC Art Gallery 69
 immunizations 27, 68

incomplete grades 63
 individual study courses 65
 Industrial Engineering, Department of 220
 Infant and Toddler Child Development Center 67
 Information, College of 91
 information sessions 45
 Information Studies 223
 Information Systems Research, Center for 12
 Information Systems Security Professionals, Certificate in 23
 Institutes and Research Centers 14
 Institutional Research, Certificate in 24
 Instructional Excellence, Program for 45, 46
 Instructional Systems, Program in 192
 instructional units, other 15
 Integrity in Research and Creative Activity 9
 Interdisciplinary Humanities, Certificate in 23
 interdisciplinary programs 25
 interinstitutional transient students 48
 Interior Design, Department of 224
 International Affairs, Program in 225
 International Bazaar 69
 International Center, programs offered
 Beyond Borders 69
 English Conversation Club 69
 Global Cafe 69
 Global Gatherings 69
 IC Art Gallery 69
 International Bazaar 69
 International Women's Group 69
 Small World Speakers Bureau 69
 World Connect 69
 International Education 21
 Archeology Programs in Italy 21
 Beyond Borders 21
 Center for Intensive English Studies (CIES) 22
 Florida-Costa Rica Institute 21
 Florida France Institute 22
 International Programs 21
 Law Program at Oxford 22, 95
 overview 21
 International Friends Program 69
 International Law, Certificate in 24
 international students
 admission requirements 27, 30
 financial requirements 27, 30
 health insurance 30, 68
 Intensive English Program 31
 International Center 31, 69
 orientation 45
 passports and visas 30
 international study centers 21
 Intramural Office (IM) 71
 Italian (Modern Languages and Linguistics) 256
J
 Japanese (Modern Languages and Linguistics) 256
 Jazz Studies, Certificate in 24
 Juris Doctor 95
 Juris Doctor/ Master of Business Administration 95
L
 L. L. Schendel Speech and Hearing Clinic 80, 170
 laboratory fees 35
 language requirements 52, 53

Late Payments Fee Appeals Committee 37
 Latin (Classics) 162
 Latin American and Caribbean Studies,
 Program in 23
 Law, College of 95, 227
 Law Enforcement, Certificate in 23
 Law Program at Oxford 22
 Leadership in Executive and Administrative
 Development in Social Work,
 Certificate in 24
 Learning and Cognition 192
 Learning Disabilities 154
 Learning Resource Center (Nursing) 107
 Learning Systems Institute 16
 libraries 16
 College of Medicine Medical Library 17,
 97
 FSU-Panama City (FSU-PC) Academic
 Resource Center 17
 Harold Goldstein Library (Information) 17
 John and Mable Ringling Museum of Art
 Library 17
 Law Library 17
 Paul A. M. Dirac Science Library 17
 Republic of Panama Branch Campus
 Library 17
 Robert Manning Strozier Library (main
 library) 17
 Warren D. Allen Music Library 17, 103
 Library Leadership and Management,
 Certificate in 24
 Linguistics Minors Graduate and
 Undergraduate, Interdepartmental 230,
 257
 loans
 delayed delivery 40
 emergency 40

M

major department, change of 65
 major professor
 doctoral 53
 master's 52
 Management, Department of 230
 Management Information Systems,
 Department of 231
 Marine Biology and Living Resource Ecology,
 Certificate in 23
 Marine Laboratory, Florida State
 University 19
 Marketing, Department of 232
 Marriage and Family, Program in 233
 master's degree programs 51
 Materials Research and Technology, Center for
 (MARTECH) 19, 146
 Mathematics, Department of 234
 Mathematics Education Program 246
 Measurement and Statistics 192
 Mechanical Engineering, Department of 238
 Media Specialist (Information Studies) 92
 Medical Doctor 97
 medical withdrawal 64
 Medicine, College of 97, 241
 Meteorology, Department of 242
 Methods and Policy of Educational
 Accountability, Certificate in 24
 Middle and Secondary Education, Department
 of 244
 military duty, students called to active 48
 minor professor 52
 Mission Statement, University 7

Modern Languages and Linguistics,
 Department of 253
 modified credit hours 47
 Molecular Biophysics, Program in 259
 Motion Picture, Television, and Recording
 Arts, College of 101, 260
 Movement Science, Master of Science in 271
 Multilingual/Multicultural Education 248
 Museum of Art, John and Mable Ringling 115
 Museum of Fine Arts 13, 115
 Museum Studies 90, 94, 115, 132, 135
 Anthropology, Certificate in 23
 Art, Certificate in 25
 Art Education, Certificate in 25
 Art History, Certificate in 25
 Classics, Certificate in 23
 Dance, Certificate in 25
 History, Certificate in 23
 Humanities, Certificate in 23
 Information Studies, Certificate in 24
 Interior Design, Certificate in 25
 Recreation and Leisure Services
 Administration Certificate 24
 Textiles and Consumer Sciences,
 Certificate in 24
 Theatre, Certificate in 25
 Theatre Administration Management,
 Certificate in 25
 Music, College of 103, 262
 Music, Doctorate in 55
 Music Composition 104, 105
 Music Education 105
 Music Education and Leadership, Certificate
 in 24
 Music of the Americas, Certificate in 24
 Musicology 104, 105
 Music Performance 104, 106
 Music Theory 104, 105
 Music Therapy 105
 Music Therapy Equivalency, Certificate in 24

N

National High Magnetic Field Laboratory 19
 Neuroscience, Interdisciplinary Program
 in 138, 267, 271, 282
 New Technology (NT) Laboratory 91
 notices, university
 Equal Employment Opportunity and Non-
 Discrimination Statement 5
 HIV/AIDS Policy 5
 Integrity in Research and Creative
 Activity 9
 Mission Statement, University 7
 Notification to All Applicants for
 Admission and Student Attending
 Florida State University 9
 Persons with Disabilities 5
 required first day attendance, 5
 Sexual Harassment Policy 5
 Summons to Responsible Freedom 8
 use of photographs and video in university
 publications 9
 Nuclear Research, Program in 19
 Nursing, College of 107, 268
 Nutrition, Food, and Exercise Sciences,
 Department of 270

O

Oceanic-Atmospheric Prediction Studies,
 Center for 19
 Oceanography, Certificate in 23

Oceanography, Department of 272
 Off-Campus Housing Office 43, 72
 Oglesby Union 72
 Online Instructional Development, Certificate
 in 24
 Opera Production, Master of 105
 Organ/Harpichord Performance, Certificate
 in 24
 Outdoor Pursuits 71
 Oxford Summer Program in Law 95

P

Panama City campus 13, 36
 admission to 31
 fees 36
 financial aid 39
 parking and bus services 69
 Participant Education, Center for 71
 Partnership for Alcohol Responsibility
 (PAR) 68
 Pedagogy of Music Theory, Certificate in 24
 Pepper Institute on Aging and Public
 Policy 125, 213
 Performance (Music) 104, 106
 Performance (Music), Certificate in 24
 Performance Management, Certificate in 23
 Performing Arts, Center for the 16
 persons with disabilities 5
 Philosophy, Department of 274
 Philosophy, Doctor of 53
 photographs and videos, use of 9
 physical education 300
 Physics, Department of 276
 Piano Pedagogy, Certificate in 24
 policies, university
 Florida State University Statement
 for Students on the Unlawful
 Possession, Use, or Distribution of
 Illicit Drugs and Alcohol 9
 HIV/AIDS 5
 required first day attendance 5
 sexual harassment 5
 use of photographs and video in university
 publications 9
 Political Economy, Certificate in 24
 Political Science, Department of 278
 Portuguese (Modern Languages and
 Linguistics) 257
 postdoctoral students 29
 Post Office, University 70
 preliminary examination 54
 Preparing Future Faculty Program 45
 prerequisites for all graduate degrees 51
 Professional Actor Training, Conservatory
 of 13, 16
 professional development 45
 Professional Education Requirements 85
 Professional Program Services 15
 Program Evaluation, Certificate in 24
 program of study
 doctoral 53
 master's 52
 Project Management, Certificate in 23
 prospectus
 doctoral 54
 master's 52
 provisional graduate students 28
 Psychology, Department of 280
 Public Administration, Certificate in 24
 Public Administration and Policy, School
 of 285
 Public Affairs Center, Florida 15

publication of directory information 61
 publication of dissertation 54
 Public Financial Management, Certificate in 24, 286
 Public Health, Program in 289
 Public Management, Florida Center for (FCPM) 16
 public safety 70

Q

quality points 62

R

radio and television 70
 WVFS Tallahassee (89.7 FM) 80
 reading and language arts 152
 readmission 28
 after multiple withdrawals 29
 appeal procedure 28
 real estate 291
 Real Estate Development, Certificate in 24
 recency of work, master's 52
 reclassification of students 61
 Recreation and Leisure Services Administration 301
 Recreation Office, Campus 71
 Reference Services, Certificate in 24
 refund of fees paid, regulations 38
 Registrar, Office of the University 47
 auditor seating privileges 48
 cancellation of schedule 38, 48
 Cooperative Programs, FAMU-FSU 48
 course/credit modification 47
 directed individual study courses 48
 drop/add or changes of schedule 48
 final term registration 56
 general information 47
 permits 47
 records, access to 49
 registration 47
 responsibility 47
 special students 48, 61
 stops to registration 37
 students called to active military duty 48
 transcripts 49
 registration
 cancellation of student schedule for non-payment of tuition, and fees 37, 47
 reinstatement of student schedules cancelled for non-payment of tuition, and fees 37, 48
 Registration Guide 47
 regulations, academic 57
 honor policy, academic 57
 rehabilitation counseling (services) 155
 reinstatement 64
 reinstatement of student schedules cancelled for non-payment of tuition 37, 48
 release of student information 60
 Religion, Department of 289
 religious holy days 61
 requirements, graduate degree 51
 Research Facilities and Special Programs 19
 residence halls 43
 residence requirements
 doctoral 53
 master's 52
 tuition 33
 Retail Merchandising, Certificate in 24
 Ringling Museum of Art, John and Mable 20, 115

Risk Management/Insurance and Real Estate and Program in Business Law, Department of 291
 Russian (Modern Languages and Linguistics) 257
 Russian and East European Studies, Interdisciplinary Program in 292

S

satisfactory/unsatisfactory (S/U) grading 63
 schedule change 48
 scholarships 40
 School Library Media Leadership, Certificate in 24
 School Library Media Specialist Certification 92
 School of Computational Science (SCS) 19
 School Psychology 194
 Science Education 250
 Science Teaching, Interdisciplinary Program in 293
 second graduate program 29
 Security Administration, Certificate in 23
 Seminole Dining 68
 Seminole Express 70
 Seminole Reservation 71
 senior citizen, waivers for 37
 Serbo-Croatian (Modern Languages and Linguistics) 258
 Sexual Harassment Policy, University 5
 Slavic (Modern Languages and Linguistics) 258
 Social Science Education 251
 Social Sciences, College of 109
 Social Sciences, Interdisciplinary Program in 293
 Social Work, College of 111, 294
 Sociology, Department of 296
 Southeast Archaeological Center 12, 127
 Spanish (Modern Languages and Linguistics) 258
 Special Education 153
 Special Event Management, Certificate in 23
 Special Music Education, Certificate in 24
 special programs
 Center for Materials Research and Technology (MARTECH) 19
 Center for Oceanic-Atmospheric Prediction Studies 19
 Program in Nuclear Research 19
 special students (non-degree seeking)
 admission 29
 reclassification 61
 regulations 61
 Speech and Hearing Clinic, L.L. Schendel 16, 80, 170
 Speech Pathology Communication Disorders 170
 Sport Management, Recreation Management, and Physical Education, Department of 300
 Sport Psychology 192
 sports, recreation and 71
 Statistical Consulting Center 303
 Statistics, Department of 302
 stops to registration 37, 47
 student
 Academic Relations Committee (Faculty Senate) 63
 Affairs, Division of 67
 Alert Force and Escort Service (SAFE) 70
 cancellation of schedule 38, 48

classification 61
 Counseling Center 68
 course load 62
 Dean of Students Department 71
 Disability Resource Center 71
 Government Association 71
 health insurance 30, 101, 261
 information, release of 60
 legal services 72
 services 67
 teaching 86
 Union 72
 Student Activities Center 72
 Student Disability Resource Center (SDRC) 71
 Student Government Association 71
 Student Life Center 72
 Student Services 67
 StudentsFirst 68
 Summons to Responsible Freedom 7, 8
 supervised research 64
 supervised teaching 64
 supervisory committee
 doctoral 53
 master's 52
 suspension 64

T

teacher certification 85
 Teacher Education, Admission to 85
 Teaching English to Speakers of Other Languages, Certificate in 23
 Television, WFSG-TV, WFSU-TV 70
 Textiles and Consumer Science, Department of 305
 Theatre, School of 307
 Theatre Administration and Management, Certificate in 25
 Theatre Training, Institute for 13
 Theodore and Vivian Johnson Adaptive Technologies Lab 71
 thesis 52
 thesis-type program 51
 time limit for completion of doctorate 54
 TOEFL (Test of English as a Foreign Language) 27, 53
 transcripts 27, 49
 transfer credit
 doctoral 53
 master's 51
 transient students
 admission of 29
 interinstitutional 48
 Traveling Scholar Program 29
 tuition 33
 agency billing 36
 department billing 36
 drop box for payment 36
 installment contracts 36

U

Underwater Crime Scene Investigation, Certificate in 23
 Union, Student 72
 Union Copy Center 70
 university calendar 4
 university history 11
 Unlawful Possession, Use, or Distribution of Illicit Drugs and Alcohol, Florida State University Statement for Students on the 9

Urban and Regional Planning, Certificate in 24
Urban and Regional Planning, Department of 311
Urban Design, Certificate in 24
Usability Center 91

V

Veteran's Affairs, Office of 72
veterans' deferments 37
Victim Advocate Program 71
Visual Arts, Theatre and Dance, College of 115
Visual Disabilities 154

W

waiver of fees
 out-of-state 37
 over 60 years of age 37
Water and Environmental Resources Engineering, Certificate in 24
Web Design, Certificate in 24
withdrawal
 from the university 64
 medical 64
 readmission after multiple, 29
Withdrawal Services 71
withdrawal with permission of dean 62, 64
Women's Center 72

Women's Group, International 69
Women's Studies 318
Work Study Program (FWSP), Federal 41
World Music, Certificate in 24

Y

Youth Services, Certificate in 24

NOTES



**John Barnhill, Assistant Vice President
for Enrollment Management
Timothy Martin, University Registrar
Kimberly A. Barber, Interim Registrar
Traci Matthews, Coordinator of
Curriculum Publications
Erika D. McCarthy, Coordinator of
Curriculum Publications
Alan Lahtinen, Director of
Academic Multimedia**

**Brittany Manfred & Freya Lahtinen, Staff Photographers
Kylene Barker, Technical Assistant
Cover and Color Section Design, Cade & Associates, Inc.**