ventative approach that we are most oriented.

Comprehensive school psychology. The program deals with the full range of school psychology practice. Individual psychological evaluation is viewed as an important role of the school psychologists, but not as the center of practice. We are particularly interested in developing consultation, in association with both individual evaluations and general system change, as a major practice in the profession.

Field work. We believe that field work is an indispensable part of the development of a well-rounded school psychologist. The fine cooperation of several local departments of school psychological services provides continuous field experiences for our students, beginning in the first semester of training. These experiences assure a strong reality orientation which complements formal conceptual development.

Admission to Graduate Study

Admission to the program is on a competitive basis, and decisions are based on past academic work, GRE aptitude scores, pertinent experience, letters of recommendation, and a statement of professional goals. Application forms should be requested from the Office of Graduate Admissions, University of South Florida, Tampa, Florida 33620. The chair of the School Psychology Admissions Committee will request further information from the applicant upon notification from the Office of Graduate Admissions that the application is on file.

Students are accepted for either doctoral or specialist level. Applications are accepted year-round. However, admission to the program is on a space-available basis, and you are encouraged to apply at the earliest possible time. Applications commonly are completed in the winter and new students are accepted for the following fall.

We request that persons become knowledgeable of the profession of school psychology, through literature and interaction with school psychologists, before making application.

Affirmative Action

The University of South Florida and the school psychology program are committed to affirmative action, and members of minority groups are strongly urged to apply.

Financial Aid

Normally all of our students receive funding through assistantships, fellowships, and/or tuition waivers. Separate forms, where necessary, are forwarded with each acceptance letter. Information concerning other forms of financial aid should be obtained as early as possible from the Office of Financial Aid, SVC 262. February 1 is the application deadline for most forms of assistance through that office.

Paid Internships

A full-time internship of one academic year in a local school system is required at the specialist level. Internship stipends must be negotiated annually with school boards. However, for the past few years all students desiring paid internships have received them, and we expect this trend to continue.

Continuing Education

Elements of the curriculum listed below will be made available to qualified practicing school psychologists who wish to upgrade their knowledge and skills without necessarily working toward a degree. Other courses and workshops will be developed for this purpose as the need arises, and a list of pertinent courses available from other departments will be maintained. The faculty will provide appropriate advising.

Undergraduate Prerequisites

Although no particular undergraduate major is required, students beginning our program must have completed one course in each of the following areas: statistics, experimental (or research methods in) psychology, and psychological (or educational) measurement.

Sample Curricula

M.A. and Ed.S. degrees. The following outline represents a typical program for a student without prior graduate work. Other courses may be selected on an individual basis to fit background and goals, and equivalent work is acceptable.

I. Diagnosis/Prescription Sequence

A. EDF 6215, Principles of Learning, or EXP 6406, Learning
B. EDF 6217, Behavior Theory and Classroom Learning
C. EGC 6435, Counseling Theories and Practices

II. Behavioral/Preventive Consultation Sequence

A. EDF 6508, Developmental Psychology, or EDF 6120, Child Development, or EDF 5136, Adolescence
B. CLP 6166, Psychopathology, or CLP 6477, Behavior Disorders of Children
C. SPS 6806, Issues in Developmental and Cultural Diversity: Educational Implications

IV. Theoretical/Research Context

B. SPS 6936, Graduate Seminar in School Psychology
C. EDG 6931, Selected Topics: Reading Diagnosis and Programming for School Psychologists
D. EDG 7931, Conduct of Disciplined Inquiry, or PSY 6217, Research Methods and Measurement - A
E. EDF 7437, Advanced Measurement I

V. Thesis
VI. Internship

Ph.D. degree. With our master’s/specialist curriculum forming a foundation, each doctoral student’s program is individually designed. At this level emphasis is given to research and to training for leadership positions in school psychology.

Department of Special Education

The Department of Special Education programmatic structure is designed to prepare personnel to plan and implement educational programs for students requiring specialized education services. Personnel training programs are designed for the Baccalaureate, Masters, Educational Specialist, and Doctoral level candidates. Areas of training include behavior disorders, gifted, mental retardation, physically handicapped, and specific learning disabilities. Depending on the training entry level of the candidate and the specific program specialty selected, the undergraduate training program content offers basic coursework and experiences leading to state certification and competencies to design and implement age appropriate programs for exceptional students in public schools and private agencies. Masters and Specialist level programs emphasize the development of leadership personnel to serve in consultant and supervisory capacities in public school and private settings. Doctoral level training further sharpens the theoretical and practical skills of experienced practitioners to assume positions focusing on research, teacher training, and significant leadership roles.

There are different entrance requirements at each level of the program. When the candidate has met the requirements for his/her program admission, a departmental advisor will be assigned. Field based experiences are a significant component of all programs. Practicum and internship experiences are included throughout each training program in educational environments located in those districts proximal to a campus on which there are resident faculty. Transportation to practicum and internship sites must be furnished by the student.

The initiation and continued professional development of degree candidates is stressed. Membership and active participation in student professional groups such as the Student Council for Exceptional Children
For holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida.

### Requirements for the B.A. Degree (EED)

This program of study is designed to prepare undergraduate students to become competent and certified teachers of emotionally handicapped students in a variety of educational settings.

#### Professional Education (36-37 hours)
- **EDF 3214** EDF 4430 EED 4941
- **EDF 3604** RED 4310 EEX 4936 or RED 4515 EEX 4940
- **EDF 3542** EDG 4200

#### Teaching Specialization (29-30 hours)

- **EEX 3010** EFX 4221 LIS 4302
- **EEX 4011** EED 4321 or EEC 4706 EEX 4240 LIS 4503 or EAE 4414 MAE 4310
- **SPA 4004** or one of the following
  - AEX 4313 MUE 4315 SSE 4313
  - HLP 4460 ECV 4310

#### Requirements for the M.A. Degree (EED)

**Plan I** — For students holding valid teacher certificates. Secondary + K-12 students must have previously taken or include in their planned program the basic special education certification courses. (36 minimum program hours)

- (a) **Process Core**: (3 hours minimum)
  - EDF 6481
- (b) **Program Core**: (18 hours)
  - EEX 6025 EEX 6221 EEX 6732
  - EEX 6201 EEX 6222 EEX 6939
- (c) **Specialization**: (12 hours)
  - EED 6201 EED 6211 EED 6943
  - EED 4943
- (d) **Electives**: (3 hours minimum)

**Plan II** — For individuals not holding valid teaching certificates and wishing to acquire certification. (66 minimum program hours)

- (a) **Process Core**: (15 hours minimum)
  - EDF 6431 EDF 6215 or EDF 6481 EDF 6517 EDF 6606
  - EDF 6211 or EDF 6544
- (b) **Program Core**: (18 hours)
  - EEX 6025 EEX 6221 EEX 6732
  - EEX 6201 EEX 6222 EEX 6939
- (c) **Specialization**: (12 hours)
  - EED 6201 EEX 6362 EED 6943
  - EED 6211
- (d) **Internship**: (6 hours)
  - EDG 6947
- (e) Additionally, to meet State of Florida certification requirements, the following courses must be included:
  - Must take one course from the following courses:
    - SPA 4004 EEC 4706 LAE 6301
  - Must take one course from the following courses:
    - RED 4310 RED 6116
  - Must take one course from the following courses:
    - MAE 4310 MAE 6116
  - Must take one course from the following courses:
    - LIS 4302 LIS 6508 LIS 6586
    - LIS 6506
- (f) Must take one course from the following courses:
  - SCE 4310 PET 6645 ARE 6358
  - SCE 6616 PET 6646 EGC 6205
  - SSE 4313 ARE 4112 EGC 6306
  - SSE 6617 ARE 4313 ADE 6197

**Plan III** — For holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida. (42 minimum program hours)

### Gifted Education (GIFTED)

#### Requirements for the M.A. Degree (EGL)

The Gifted Child Teacher Training program provides advanced training for certified teachers to work with the gifted and talented children and to work with other teachers on a consultant or teacher-leader basis.

Emphasis is on development of specific skills to:
1. identify the gifted
2. make an individual diagnosis of cognitive and affective strengths and weaknesses;
3. modify the educational program to develop the gifted child’s potential and;
4. consult and guide the gifted student, family, and teachers to understand and develop the students’ unique abilities.

- (a) **Process Core**: (12 hours minimum)
  - EDF 6431 EDF 6215 EDF 6517 or EDF 6606
  - EDF 6211 or EDF 6544
- (b) **Program Core**: (10 hours)
  - EEX 6025 EEX 6221 EEX 6732
  - EEX 6201 EEX 6222 EEX 6939
- (c) **Specialization**: (18 hours)
  - EGI 5051 EGI 6943 EGI 6932
  - EGI 5325 EGI 6936 EGI 6416
- (d) **Electives**: (3 hours minimum)

**Plan II** — For individuals not holding valid teaching certificates and wishing to acquire certification. (66 minimum program hours)

- (a) **Process Core**: (15 hours minimum)
  - EDF 6431 EDF 6215 or EDF 6481 EDF 6517 EDF 6606
  - EDF 6211 or EDF 6544
- (b) **Program Core**: (18 hours)
  - EEX 6025 EEX 6221 EEX 6732
  - EEX 6201 EEX 6222 EEX 6939
- (c) **Specialization**: (12 hours)
  - EGI 5051 EGI 6943 EGI 6932
  - EGI 6232 EGI 6416 EGI 6936
- (d) **Internship**: (6 hours)
  - EDG 6947
- (e) Additionally, to meet State of Florida certification requirements, the following courses must be included:
  - Must take one course from the following courses:
    - SPA 4004 EEC 4706 LAE 6301
  - Must take one course from the following courses:
    - RED 4310 RED 6116
  - Must take one course from the following courses:
    - MAE 4310 MAE 6116
  - Must take one course from the following courses:
    - LIS 4302 LIS 6508 LIS 6586
    - LIS 6506
- (f) Must take one course from the following courses:
  - SCE 4310 PET 6645 ARE 6358
  - SCE 6616 PET 6646 EGC 6205
  - SSE 4313 ARE 4112 EGC 6306
  - SSE 6617 ARE 4313 ADE 6197

Plan III — For holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida. (42 minimum program hours)
Mental Retardation

Requirements for the B.A. Degree (EMR)

This program of study is designed to prepare undergraduate students to become competent and certified teachers of mentally handicapped persons in a variety of settings.

Professional Education (33-34 hours)

- EDF 3214 EDF 4430 EMR 4941
- EDF 3604 RED 4310 EEX 4936
- or EDF 4200 EEX 4940
- EDF 3542

Teaching Specialization: (32-33 hours)

- EMR 3011 EMR 4080 LAE 4414
- EEX 3010 EMR 4310 or
- EED 4011 EEX 4240 LIS 4302
- EEC 4706 or LIS 4503
- SPA 4004 EMR 4313 MAE 4310
- EEX 4221

One of the following:

- ARE 4313 MUE 4315 SSE 4313
- HLP 4460 SCE 4310

Requirements for the M.A. Degree (EMR):

Plan I — For students holding valid teaching certificates. Secondary & K-12 students must have previously taken or include in their planned program the basic special education certification courses. (36 minimum program hours)

(a) Process Core: (3 hours minimum)

- EDF 6481

(b) Program Core: (18 hours)

- EEX 6025 EED 6221 EEX 6732
- EEX 6201 EEX 6222 EEX 6939

(c) Specialization: (12 hours)

- EMR 6052 EMR 6303 EMR 6943
- EPH 5051

(d) Electives (3 hours minimum)

Plan II — For individuals not holding valid teaching certificates and wishing to acquire certification. (63 minimum program hours)

(a) Process Core: (15 minimum hours)

- EDF 6431 EDF 6215 EDF 6517 or EDF 6606
- EDF 6211 or EDF 6606 or

(b) Program Core: (18 hours)

- EEX 6025 EED 6221 EEX 6732
- EEX 6201 EEX 6222 EEX 6939

(c) Specialization: (9 hours)

- EMR 6052 EMR 6303 EMR 6943

(d) Internship (6 hours)

- EDG 6947

(e) Additionally, to meet State of Florida certification requirements, the following courses must be included:

- Must take one course from the following courses:
  - SPA 4004 EEC 4706 LAE 6301

- Must take one course from the following courses:
  - RED 4310 RED 6116

- Must take one course from the following courses:
  - MAE 4310 MAE 6116

- Must take one course from the following courses:
  - LIS 4302 LIS 6508 LIS 6586
  - LIS 6506

- (f) Must take one course from the following courses:
  - SSE 4313 ARE 4112 EGC 6306
  - SSE 6617 ARE 4313 ADE 6197

SPECIFIC LEARNING DISABILITIES

Requirements for the B.A. Degree (ELD):

This course of study is designed to prepare the student as a competent learning disabilities specialist.

Professional Education (36-37 hours)

- EDF 3214 EDF 4430 ELD 4941
- EDF 3604 RED 4310 EEX 4936
- or RED 4515 EED 4940
- EDF 3542 EDG 4200

Teaching Specialization: (29-30 hours)

- EEX 3010 EEX 4221 LIS 4302
- ELD 4011 ELD 4110 or
- EED 4011 EEX 4240 LIS 4503
- EEC 4706 LAE 4414 MAE 4310
- or MAE 4545

SPA 4004

One of the following:

- ARE 4313 MUE 4315 SSE 4313
- HLP 4460 SCE 4310

Requirements for the M.A. Degree (ELD):

This course of study is designed to prepare the student to become a more effective learning disabilities specialist.

Plan I — For students holding valid teaching certificates. Secondary & K-12 students must have previously taken or include in their planned program the basic special education certification courses. (36 minimum program hours)

(a) Process Core: (3 hours)

- EDF 6481

(b) Program Core: (18 hours)

- EEX 6025 EED 6221 EEX 6732
- EEX 6201 EEX 6222 EEX 6939

(c) Specialization: (12 hours)

- ELD 6141 ELD 6115 MAE 6549

(d) Electives (3 hours)

Plan II — For individuals not holding valid teaching certificates and wishing to acquire certification. (66 minimum program hours)

(a) Process Core: (15 minimum hours)

- EDF 6431 EDF 6215 EDF 6517 or EDF 6606
- EDF 6211 or EDF 6606 or

(b) Program Core: (18 hours)

- EEX 6025 EED 6221 EEX 6732
- EEX 6201 EEX 6222 EEX 6939

(c) Specialization: (12 hours)

- ELD 6141 or ELD 6115

(d) Electives (3 hours)

- MAE 6548 MAE 4545
(d) Internship (6 hours)
EDG 6947

(e) Additionally, to meet State of Florida certification requirements, the following courses must be included:
Must take one course from the following courses:
SPA 4004 EEC 4706 LAE 6301
Must take one course from the following courses:
RED 4310 RED 6116
Must take one course from the following courses:
MAE 4310 MAE 6116
Must take one course from the following courses:
LIS 4302 LIS 6508 LIS 6586
LIS 6506

(f) Must take one course from the following courses:
SCE 4310 PET 6645 ARE 6358
SCE 6616 PET 6646 EGC 6205
SSE 4313 ARE 4112 EGC 6306
SSE 6617 ARE 4313 ADE 6197

Plan III — For holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida.

45 minimum program hours

(a) Process Core: (12 hours minimum)
EDF 6431 EDF 6215 EDF 6544
EDF 6481 EDF 6517 or EDF 6606
EDF 6211 or EDF 6606

or

(b) Program Core: (18 hours)
EEX 6025 EED 6221 EEX 6732
EEX 6201 EEX 6222 EEX 6939

(c) Specialization: (12 hours)
ELD 6141 or ELD 6115
MAE 6548 MAE 4545

(d) Electives (3 hours minimum)
Additional courses, including electives, are planned jointly by the student and his/her adviser.

Requirements for the Ed.S. Degree
The College of Education offers an Educational Specialist (Ed.S.) degree in Curriculum and Instruction with an emphasis in Exceptional Child Education. Candidates for admission to the Ed.S. program must meet the entrance requirements of the College of Education plus the following:
1. certification in exceptional student education; and
2. one year of teaching experience in exceptional student education.

Program Requirements
Special Education Specialization 14 hours
Research Design 4 hours
Project 9 hours
Electives 10 hours

37 hours

Courses will be selected by the student and adviser from those available at the 6000 and 7000 level. Six hours of 5000 level courses may be included with approval of the Department Chairperson.

Comprehensive Examination
During the last term of enrollment, the candidate must perform satisfactorily on a comprehensive examination.

Requirements for the Ph.D. Degree
The Special Education Department offers the Ph.D. in Curriculum and Instruction with specialization in Special Education. The Department strives to maintain a quality program and is restrictive and selective of its applicants. In addition to the University and College criteria for admission to the Ph.D. program, the Department maintains the following requirements:
1. three years teaching experience in special education;
2. grade point average of 3.5 at the graduate level;
3. adequate Departmental resources necessary to maintain the quality of the Ph.D. program;
4. competitiveness of the candidate in relation to other candidates for the limited available Departmental resources; and
5. favorable recommendation of the Department Advanced Graduate Admissions Committee and the Department Chairperson.

Program Requirements
The Ph.D. candidate's program of study is individually planned by the student and a faculty advisory committee and approved by the Department Chairperson. The program will include, but not be limited to, the following:

Dissertation 18 hours
Special Education
EEX 7341 3 hours
EEX 7911 3 hours

At least 10 hours from the following:
EEX 7203 3 hours
EEX 7301 1-4 hours
EEX 7841 1-4 hours
EEX 7930 1-4 hours

Cognate Area
Statistics/Measurement/Research 11 hours
Foundations/Curriculum 12 hours
Language/Computer Science non-credit

71 hours
COLLEGE OF ENGINEERING

Have you ever felt you would like to be the "somebody" who will do "something" about the many problems we face? Our modern society requires new, practical solutions to its many complex technological problems. Spearheading this action will be the engineer and the engineering profession. The engineer, as always, will continue to be responsible for and obliged to use his/her knowledge for the benefit of mankind.

The increasingly rapid changes in our life style place an ever stronger responsibility to society and to our future on both those who are providing the engineering education as well as those who are being educated. The College of Engineering recognizes this in its approach to the education of tomorrow's engineers as well as in the content of the other programs under its direction which are vital to the technological progress of our society. Its curricula provides for an individual's development in both technical competency and human values.

The programs offered by the College of Engineering to meet the diverse requirements of the future cover three areas: Professional Engineering, Applied Science, and Technology. The specific degrees and services offered are as follows:

**Bachelor of Science in Chemical Engineering (B.S.Ch.E.)**
**Bachelor of Science in Civil Engineering (B.S.C.E.)**
**Bachelor of Science in Computer Engineering (B.S.Cp.E.)**
**Bachelor of Science in Electrical Engineering (B.S.E.E.)**
**Bachelor of Science in Engineering degree (B.S.E.)**
various options available including General Engineering and Engineering Mechanics
**Bachelor of Science in Industrial Engineering (B.S.I.E.)**
**Bachelor of Science in Mechanical Engineering (B.S.M.E.)**
**Bachelor of Science in Computer Science (B.S.C.S.)**
**Bachelor of Science in Information Systems (B.S.I.S.)**
**Bachelor of Science in Engineering Science degree (B.S.E.S.)**
various Options (programs) in:

- Environmental Engineering Science
- Other Options
- Bachelor of Engineering Technology (B.E.T.)
**Master of Science in Chemical Engineering (M.S.Ch.E.)**
**Master of Science in Civil Engineering (M.S.C.E.)**
**Master of Science in Computer Engineering (M.S.Cp.E.)**
**Master of Science in Computer Science (M.S.C.S.)**
**Master of Science in Electrical Engineering (M.S.E.E.)**
**Master of Science in Engineering Management (M.S.E.M.)**
**Master of Science in Industrial Engineering (M.S.I.E.)**
**Master of Science in Mechanical Engineering (M.S.M.E.)**
**Master of Science in Engineering (M.S.E.)**
**Master of Science in Science and other options**
**Master of Science in Engineering Science (M.S.E.S.)**
**Computer Science and other options**
**Doctor of Philosophy - Programs in:**

- Chemical Engineering
- Civil Engineering
- Computer Science and Engineering
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

The above spectrum of program offerings provides the prospective student with a choice of avenues depending upon individual interests, career objective, and capabilities for a significant technological contribution. These programs are described in more detail under their respective catalog headings.

Laboratory experience as well as real-world participation in technological problem-solving is a key aspect of a professional engineer's or a technologist's college education. The College of Engineering, in implementing this need, augments its own modern laboratory and research facilities by close contact with the professional societies and the many industries in the metropolitan Tampa Bay area.

Students interested in particular programs offered by the College of Engineering should direct their inquiries to the College of Engineering marked for the attention of the following:

**Area of Interest**
**Contact**

- Engineering Professional Programs, Engineering Science, Computer Science, Information Systems Engineering Technology
- Computer Service Courses
- *Pending Board of Regents Approval

**PROFESSIONAL ENGINEERING**

The Engineering programs of the college have been developed with an emphasis on three broad aspects of engineering activity—design, research, and the operation of complex technological systems. Students who are interested in advanced design or research should pursue the Five-Year Program leading to a Master of Science in Engineering degree. Other students interested more in operational responsibilities may wish to terminate their initial engineering education at the baccalaureate level. The Bachelor of Science degrees offered in various engineering fields provide the student a broad education with sufficient technical background to effectively contribute in many phases of Engineering not requiring the depth of knowledge needed for advanced design or research.

The College of Engineering recognizes that modern engineering solutions draw on knowledge of several branches of engineering. It also recognizes that future technological and societal developments will lead to shifting of the relative emphasis on various branches of engineering, triggered by new needs or a reassessment of national goals. For this reason the college's program includes a strong engineering foundation (core) portion, designed to equip the prospective engineer with a broad base of fundamental, technical knowledge. To this foundation is added the student's specialization (option) of sufficient depth to prepare him/her to successfully embark on a professional career.

While the baccalaureate degree is considered the minimum educational experience for participating in the Engineering profession, and as such is the first professional degree, students are strongly encouraged to pursue advanced work beyond the baccalaureate either at this or other institutions. It is becoming increasingly evident that a large segment of today's engineering professional is involved in some form of post baccalaureate study. Engineers are earning advanced degrees to obtain the information and training necessary to meet effectively tomorrow's technological challenges. All are faced with the continuing problem of refreshing and updating their information skills and most are obtaining advanced information by means of formal graduate study, seminars, special institutes and other such systems designed for this purpose.

The Bachelor of Science (in a designated field) degree program, which requires 136 semester hours) and the Master of Science degree in the same field may be pursued simultaneously in an integrated program of 166 semester hours called the 5-year program. These programs are specifically designed to prepare an individual for a professional career as an engineer. These programs have as their foundation a 104 semester hour core of subject material encompassing Humanities, Social Science, Mathematics, Science, and Engineering which is required of all students. In addition to the core subject material each student will complete speciali-
zation studies in a designated field under the direction of one of the administrative departments of the college. Fields (Options) which are available and the administrative unit responsible for these are as follows:
Field/Option
General Engineering
Chemical Engineering
Computer Engineering
Electrical Engineering
Industrial Engineering
Mechanical Engineering
Structures, Materials, and Fluids

Debins

Departments
All Departments
Chemical and Mechanical Engineering
Computer Science and Engineering
Electrical Engineering
Industrial and Management Systems Engineering
Chemical and Mechanical Engineering
Civil Engineering and Mechanics

The Accreditation Board for Engineering and Technology, Inc. (ABET), formerly the Engineers’ Council for General Engineering All Departments available and the administrative unit responsible for these administrative departments of the college. Fields (Options) which are as

Industrial Engineering
Computer Engineering
Electrical Engineering

defined by the Chemical Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering, and Structures, Materials & Fluids options.

Preparation for Engineering

Students planning to attend USF’s College of Engineering should familiarize themselves thoroughly with the college’s admission standards and requirements, which are more stringent than the university’s minimum entrance requirements.

The high school student anticipating a career in engineering should elect the strongest academic program that is available while in high school. Four years each of English, mathematics and science (preferably including Chemistry and Physics), as well as full programs in the social sciences and humanities, are most important to success in any engineering college. A foreign language, while not a necessity, provides a desirable background for students.

Prospective students considering engineering at the University of South Florida who lack certain preparation in high school must elect to follow a program to overcome their deficiencies. One alternative might be that such a student take some remedial work and a less accelerated program as a Pre-Engineering student in the Academic Services Division of the University of South Florida. As another alternative, students may wish to avail themselves of the state’s system of junior/community college which offer a wide range of remedial course work, and many of which also offer full programs in pre-engineering (first two years’ course work). The University of South Florida generally offers all required pre-engineering courses every semester. Therefore, every student can start the program at that point where his/her education terminated, and can proceed from that point at a rate consistent with the student’s capability and time availability.

Junior/community college students planning to transfer to the University of South Florida’s engineering program at the junior level from a State of Florida operated college or university should follow a pre-engineering program leading to an A.A. degree. All transfer students should complete as much of the mathematics, science and engineering core course work as is available to them. Transfer students should be aware that the college expects them to meet its admission requirements listed on page 105 and the college regulations listed on page 106 just as it expects its own students to meet these requirements. Junior/community college transfer students should note that in addition to freshman and sophomore level courses, required junior level courses are given each semester thus permitting full continuity in studies for the student. Senior/community college students intending to pursue an engineering program at USF should contact the advisor, at their institution and request a course equivalency list.

The College of Engineering can assist students who are planning to obtain an Engineering degree from the University of South Florida and who have started their studies elsewhere in formulating a sound total program. Interested students should contact the college’s Advising Office furnishing sufficient details to permit meaningful response.

Admission to the College

Freshmen and transfer students can apply to the College of Engineering’s programs upon initial entry into the University by declaring the desired Bachelor degree program as their intended major. If not declared on initial entry, a USF student can at any time declare his/her intent to pursue a Bachelor’s degree program in the College by applying to the Admission’s Section of the Advising Office of the College.

To qualify for admission to a Bachelor’s degree program in the College of Engineering a student must have been accepted by the University as a degree-seeking student, must be in good academic standing, and must be otherwise acceptable to the college. Increasing enrollment demand (prompted by growing demand for engineers and scientists), and limited resources have forced the college to limit enrollment to maintain the quality of its programs.

Limited enrollment is implemented by admitting students to programs from the College’s Applicant Pool. Minimum academic performance criteria to enter the Applicant Pool are shown below. All comparable applicants to College of Engineering programs are subject to the same entrance requirements whether transferring from within USF or from another institution. Applicants, meeting minimum requirements, are assigned to the College’s Applicant Pool from which successful candidates are chosen. Unusually well qualified applicants may be immediately notified of their acceptance to the program of their choice.

Selection of students to fill programs is made by the College Admissions Committee using criteria such as educational objective, completion of appropriate prerequisite courses, performance in appropriate prerequisite courses, overall academic record, test data, personal record, recommendations, and other appropriate criteria. All selections are made in compliance with State University System admissions policies, the Statewide Articulation Agreement, and in order of qualification of the applicants. Due to heavy demand and limited resources the admissions standards may vary between programs.

To enter the Applicant Pool the following minimum academic performance criteria must be met:

1. All Bachelor of Science degree programs:
   A. Freshmen:
      1. Test Scores:
         SAT - composite of 1000 minimum and quantitative of 550 minimum.
         ACT - composite of 24 minimum and mathematics of 24 minimum.
      2. High School Mathematics: Grades of B or better. Must include sufficient algebra and trigonometry to enter Engineering Calculus.
      3. Overall grade point average of 2.4/4.0 as calculated by the College of Engineering Admissions Office.
   B. Transfer Students:
      1. Students transferring in must have completed the first two Engineering Calculus courses with a 2.3 GPA for all math courses attempted; must have completed one year of appropriate Physics and Chemistry courses with a minimum of 2.3 GPA for all Physics and Chemistry courses attempted; must have an overall GPA of 2.4 or better, as calculated by the College of Engineering Admissions Office.
   All students, undergraduate and graduate, whose native language is other than English, entering the College of Engineering must have taken, within the last year, the Test of English as a Foreign Language (TOEFL), and have the score sent to both the University’s Admissions Office and to the College. A score of 550 or better is required.
   All undergraduate students must present a score (passing score after August, 1984) on the College Level Academic Skills Test (CLASS), and fulfill the writing and computation course requirement of GA-10.30 prior to admission into the upper division of the University.

Prospective students must comply with the following procedures when applying to the College to enter the Applicant Pool:

1. Apply for admission to the University or be a degree-seeking student in the University.
2. Apply for admission to the College of Engineering by completing the College Application and sending it directly to the College of Engineering, Admissions Section. In addition:
   a. The desired semester of entrance must be specified.
   b. Freshmen and sophomores must request a copy of their high school transcript along with SAT and ACT test scores be sent to the College of Engineering, Admissions Section, in addition to records that must be sent to the University’s Admissions Office.
   c. Transfer students must request an official transcript from each previous college attended be sent to the College of Engineering, Admissions Section, in addition to transcripts that must be sent to the University’s Admissions Office.
The departments are responsible for the professional programs in engineering, in addition to scores that must be sent to the University’s Admissions Office.

3. Applications and necessary records must reach the College no later than dates indicated below:
   - For Fall Semester 1984: June 8, 1984
   - For Spring Semester 1985: October 19, 1984
   - For Summer Semester 1985: February 15, 1984

Applicants who are not selected and who wish to remain in the Applicant Pool for a future semester must request in writing that the College update their application for the future term and must supply updated records.

Potential students should note that the critical course structure of the college’s programs makes it desirable to enter the college as soon as the interest in, and the potential ability for, engineering or related studies is recognized. The characteristics of an engineering or related program do not require an identification of the area of specialization at the time of entering the college. A student who is undecided on his/her area of specialization can declare the General Option of the Bachelor of Science in Engineering degree program at the time of entry and later transfer to his/her specific program. However, students need to make this decision no later than their junior year.

Engineering coursework identified as 3000 level or higher is considered professional level work and students enrolling for these courses must have been admitted to the college. Exceptions must receive prior permission from the Office of the Dean or the department chairperson responsible for the coursework and must demonstrate that they meet the college’s entrance requirements as well as all prerequisites for the course involved.

Due to the demand for engineering courses, it is difficult to guarantee full course loads; therefore, engineering students are strongly encouraged to participate in the initial registration each term.

**Engineering Advising**

Effective pursuit of engineering and engineering related studies requires careful attention to both the sequence and the type of courses taken. The engineering curriculum differs in key respects from the study plans of other majors—even in the freshmen year. It is therefore important, and the college requires, that each student plan a curriculum with, and has it approved by, a faculty adviser in the College of Engineering.

Students accepted to the college from within the University will be assigned a faculty adviser. New students must attend the University’s Orientation program. They are assigned an engineering adviser during this program and receive advisement for their first semester at that time.

Students who have made a decision regarding the specific engineering field they plan to follow may be assigned a faculty adviser in the department corresponding to their interest. Students who have decided on the specialty are advised by the Dean’s Office and are assigned to the General Option of the BSE program.

The student and adviser jointly work out a plan of study which meets both the student’s career objectives and the College of Engineering’s degree requirements. A student may change advisers with the concurrence of the new adviser and the Dean’s Office. The advisers maintain the College of Engineering’s student records.

While the College provides advising services to assist students with academic planning, the responsibility for seeing that all graduation requirements are met rests with the students.

**Chemical and Mechanical Engineering**

This department offers study pertinent to the analysis and design of processes and equipment needed by our modern society, through courses dealing with the classical mechanical and chemical engineering subjects of lubrication, vibration and fatigue analysis, machine design, thermodynamics, transport phenomena, separation processes and reactor dynamics. In addition, it provides instruction in other fields of increased importance to the engineers of the future. Some of these fields are computer simulation, instrumentation, automatic control, power utilization, acoustics, and nuclear processes and the design and evaluation of innovative systems for energy utilization and pollution control. This department administers programs leading to the following undergraduate degrees: Bachelor of Science in Chemical Engineering (B.S.Ch.E.), Bachelor of Science in Mechanical Engineering (B.S.M.E.), Bachelor of Science in Engineering (General Option, B.S.E.E.), and Bachelor of Science in Chemical Engineering (B.S.Ch.E.). The Chemical and Mechanical Engineering Department also administers programs leading to the following graduate degrees: Master of Science in Chemical Engineering (M.S.Ch.E.), Master of Science in Mechanical Engineering (M.S.M.E.), Master of Engineering (M.E.), Master of Science in Engineering (M.S.E.), and Doctor of Philosophy (Ph.D.).

**Civil Engineering and Mechanics:**

This department offers course work and study pertinent to Civil Engineering, Engineering Mechanics, Materials Science, and Environmental Engineering. Topics included are structural analysis, design and optimization; metals, polymers, ceramics, solid and fluid mechanics, stress analysis, vibrations, continuum mechanics, aerodynamics, gas dynamics, wave propagation, numerical methods; geotechnical engineering; transportation engineering; water resources, waste treatment, environmental engineering, and coastal engineering. The department administers the Structures, Materials and Fluids option (program) of the Bachelor of Science in Engineering (B.S.E.) degree program, and offers several concentrations within this option. It also administers the Bachelor of Science in Civil Engineering (B.S.C.E.) and the Environmental Engineering option of the Bachelor of Science in Engineering Science (B.S.E.S.) degree programs and the Master of Science in Civil Engineering (M.S.C.E.) program, including a three year evening program. As applicable the department administers the M.S.C.E., M.S.E., M.C.E., M.E., M.S.E.S. and the Ph.D. in Civil Engineering programs.

**Computer Science and Engineering**

This department offers course work and study in all areas fundamental to Computer Engineering, Computer Science and Information Systems. Topics dealt with are software engineering, programming languages, computer algorithms, computer system organization, computer networks and distributed computing, artificial intelligence, database systems and theories of computation.

The department’s facilities include microprocessor laboratories equipped with modern microcomputers, a graphics laboratory equipped with modern display devices and a substantial number of graphics-oriented personal computers. A PDP 11/44 computer running under UNIX operating system and a PRIME 750 medium scale computer are used to support several software related courses. The PRIME computer also functions as a node of a college-wide network of three computers. The department administers the baccalaureate degrees in Computer Science, Computer Engineering, and Information Systems. It also offers graduate degrees at the Master of Science level in Computer Science and Computer Engineering, and a Ph.D. degree.

**Electrical Engineering**

This department offers study in all areas fundamental to Electrical Engineering and the electrical sciences: circuit analysis and design, electronics, communications, electromagnetics, solid state, systems analysis, digital circuit design, etc. Basic concepts are augmented with well-equipped laboratories in networks, electronics, automatic control, digital systems, electromechanics, microwave techniques and communications. In addition, a general purpose computer facility, a microprocessor laboratory and a microelectronics fabrication laboratory are available to undergraduates and graduate students. The department administers the Electrical Engineering Option (program) of the Bachelor of Science in Engineering (B.S.E.) degree program, the Bachelor of Science in Electrical Engineering (B.S.E.E.) degree program, as well as the Master of Science in Electrical Engineering (M.S.E.E.) program which is also available to evening and off-campus students. As applicable, the department adminis-

**Departments & Programs**

The supervision of the academic programs for the college is the function of the five administrative departments together with several coordinators. The departments are responsible for the professional programs in engineering and engineering science. Each department is responsible for programs, faculty, laboratories and students assigned to it. See also page for College Facilities.
1. Non-Technical Requirements

The department administers the Bachelor of Science in Industrial Engineering (B.S.I.E.) degree program, as well as the Master of Science in Industrial Engineering (M.S.I.E.), and Ph.D. in Industrial Engineering. Evening and off-campus programs are available through the Master of Science in Engineering Management (M.S.E.M.) program. The department also administers the industrial option in the M.S.E., M.E., and M.S.E.S. programs.

Engineering Core

Both the four-year and five-year curricula of the College of Engineering Bachelor of Science programs are founded on a common core of course work which is required of all students. This course work is designed to give each student a thorough foundation of knowledge on which specialization studies and a professional career can be based. Emphasis is placed on five key elements: development of communication skills, familiarity with the Social Sciences and Humanities, a solid base in science and mathematics, a strong foundation in basic engineering sciences and applications and design experience in a field of specialization.

Each degree granting department has developed a list of courses to provide key elements for the degree offered. While the specific courses will vary slightly from one department to another, the hours in each category will be approximately as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-technical Courses</td>
<td>30 Sem. Hrs.</td>
</tr>
<tr>
<td>(Social Sciences, Humanities, Communications)</td>
<td></td>
</tr>
<tr>
<td>Mathematics, Chemistry and Physics (Minimum)</td>
<td>35 Sem. Hrs.</td>
</tr>
<tr>
<td>Basic Engineering Science (Minimum)</td>
<td>36 Sem. Hrs.</td>
</tr>
<tr>
<td>Department Specialization</td>
<td>35 Sem. Hrs.</td>
</tr>
<tr>
<td></td>
<td>136</td>
</tr>
</tbody>
</table>

Special requirements exist for Chemical Engineering. Students selecting this field should make sure they familiarize themselves with these. Detailed information can be obtained from the responsible department or the college's Advising Office.

1. Non-Technical Requirements

Prospective Engineering majors must take six hours of Freshman English (ENC 1101, 1104) in their first two semesters.

Additional course work in this category is required as specified in the individual curricula printed on pages which follow. Students are advised to check the list of “Approved Social Sciences and Humanities Courses” before enrolling. If a student desires credit for a course not on the list, she/he must obtain approval in writing from the department chairperson (or approved representative) prior to enrollment. In no case will credit be allowed for courses taken on an S/U basis. A minimum of eight credit hours of this course work must be taken at a level of at least 2000 hours. At least six credit hours must be taken in each of the Humanities/Fine Arts area and the Behavioral and Social Sciences area (to meet the University’s General Distribution Requirements). In selecting courses to meet the minimum requirements in the Social Sciences and Humanities, each student should pick at least six hours of work which will satisfy 6A-10.30 (The “Gordon Rule”). It is recommended that the student pursue specific subject areas to some depth, since this develops areas of knowledge and interests which aid fuller development of the individual and later assist in relating a profession career to nonprofessional environments and situations.

It is desirable that at least 24 hours of this course work be taken in the first two years. Students are responsible for checking with their advisers to be sure that the specific courses they are taking meet the requirements of the Bachelor of Science in Engineering degree program.

Students who transfer from a State of Florida community college with an Associate of Arts degree who have met that college’s General Education Requirement will normally find that their General Education course work satisfies the major portion - but not all - of the Social Sciences and Humanities Core requirement.

Credit by Examination can be obtained for some of this course work. CLEP General Examination credit, acceptable to the University is accepted for the areas of English Composition, Humanities and Social Sciences. Credit for CLEP Subject Examinations and CEEB Advanced Placement Tests can be accepted when the subject covered is recognized to be equivalent to USF course(s) on the “Approved Social Sciences and Humanities Courses” list. Questions in this area should be directed to the Coordinator of Engineering Advising in the college’s Advising Office.

2. Mathematics and Science Core Requirements

The student with a satisfactory high school preparation must take 35 credit hours of mathematics and science course work. (Some credit towards this core requirement can be obtained by passing applicable CEEB Advanced Placement Tests or CLEP Subject Examinations.)

In mathematics this course work consists of a Calculus for Engineers sequence (or a calculus sequence of equivalent level), differential equations, and additional hours of designated courses supportive of the student’s selective field of specialization, as specified by the department. In the science course work students must take the physics with calculus sequence and the general chemistry sequence. All students must take the chemistry placement test.

Students whose high school preparation is insufficient to enter the Calculus for Engineers are required to take supplementary algebra and trigonometry prior to being considered for acceptance into the College. All students must take the math placement test.

3. Engineering Core Requirements

The prospective engineering major must take a minimum of 35 credit hours of engineering core (foundation) course work drawn from the major disciplines. This course work is designed to equip the student with a sound technical foundation for later more advanced specialized course work and the eventual formation of professional judgment. This course work includes introductory studies in such areas as engineering analysis and computation, statistics, electrical engineering principles, thermodynamics, statics, dynamics, fluids, and properties of materials.

All but 6 credit hours of the engineering core are common to all areas of specialization (option) of the Bachelor of Science in Engineering and the Bachelor of Science in a Designated Engineering Field degree programs. The remaining 6 credit hours of course work must be chosen with the concurrence of the departmental adviser to fit the field selected by the student. Details on this selection are available in the departmental office of the field selected, or in the college’s Advising Office.

FIVE-YEAR PROGRAM—
BACHELOR OF SCIENCE IN ENGINEERING DEGREE (EGU)
AND BACHELOR OF SCIENCE IN DESIGNATED ENGINEERING FIELD DEGREE

These engineering degrees are awarded upon successful completion of a program consisting of the required three areas of core course work-minimum of 101 credit hours - which are described above, and an additional 35 credit hours of coursework in a designated field of specialization. Details covering specific fields are available on request from the responsible department, or from the college’s Advising Office.

Programs are offered in the following disciplines of Engineering:

1. General

All departments of the College of Engineering may offer the general option of the Bachelor of Science in Engineering degree. This program consists of the basic engineering core of approximately 100 semester hours plus additional credits to produce a total of 136, in a designated field of specialization. This program is tailored to meet needs of students who have very specific goals and wish to deviate from a prescribed disciplinary program. Since the program is tailored for individual students a curriculum cannot be published and, therefore, it cannot be accredited. Because of this it is not recommended for most students. Nevertheless, it can be a
2. Chemical Engineering (32 credit hours)

Students pursuing the Bachelor of Science in Chemical Engineering program take designated, specialized course work in advanced chemistry, thermodynamics, energy conversion, separation processes, transport phenomena, heat and mass transfer, reacting systems, process control and instrumentation, as well as approximately 10 credit hours of chemistry and technical electives. Students must also satisfactorily complete a design and/or case study as part of their program. Special characteristics of the Chemical Engineering program make it imperative that students retain constant close contact with their adviser.

Students completing this program normally initiate their careers in chemical process industries (C.P.I.). Experienced chemical engineers are found in technical and administrative positions in the power generating industries, government planning and regulatory agencies, and consulting and research enterprises. Main products produced by the C.P.I. are petro-chemicals, fertilizers, pharmaceuticals, polymers and fibers, synthetic fuels, etc. Such modern societal problems as controlling pollution, handling wastes, advancing medical technology and providing food and energy more efficiently depend on the chemical engineer, among others, for the solutions.

The programs for Chemical Engineering and Mechanical Engineering are offered by one unit, the Chemical and Chemical and Mechanical Engineering Department. Much of the course work is common to the two programs as indicated in the curricula which follow. This provides an opportunity for a student to complete the requirements for both degrees with approximately 30 carefully chosen additional hours. The schedule which follows indicates how a serious well prepared student who can devote full time to course work can satisfy requirements in four academic years. Students without a solid foundation and those who cannot devote full time to academics should plan a slower pace.

Bachelor's Curricula for Chemical & Mechanical Engineering

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman English</td>
</tr>
<tr>
<td>MAC 3281</td>
<td>Engineering Calculus I</td>
</tr>
<tr>
<td>CHM 2045</td>
<td>General Chem I</td>
</tr>
<tr>
<td>EGN 1002</td>
<td>Engineering Orientation</td>
</tr>
<tr>
<td>EGN 1151</td>
<td>Intro to Design Graph.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social &amp; Behav. Science Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1104</td>
<td>Freshman English II</td>
</tr>
<tr>
<td>MAC 3282</td>
<td>Engineering Calc II</td>
</tr>
<tr>
<td>CHM 2046</td>
<td>General Chem. II</td>
</tr>
<tr>
<td>CHM 2045L</td>
<td>Gen Chem I Lab</td>
</tr>
<tr>
<td>PHY 3040</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHY 3040L</td>
<td>Gen. Physics Lab</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester III</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 3283</td>
<td>Engineering Calculus III</td>
</tr>
<tr>
<td>CHM 2046L</td>
<td>Gen. Chem II Lab</td>
</tr>
<tr>
<td>PHY 3041</td>
<td>Gen. Physics</td>
</tr>
<tr>
<td>PHY 3041L</td>
<td>Gen. Physics Lab</td>
</tr>
<tr>
<td>EGN 2210</td>
<td>Fortran for Engineers</td>
</tr>
<tr>
<td>EGN 3313</td>
<td>Statics</td>
</tr>
<tr>
<td>EGN 4450</td>
<td>Intro to Linear Systems</td>
</tr>
<tr>
<td>Approved Non-Tech Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

3. Computer Science and Engineering

Three undergraduate programs are offered within computer science and engineering. They are: The Computer Engineering program (leading to a Bachelor of Science in Computer Engineering), the Computer Science program (leading to a Bachelor of Science in Computer Science) and the Information Systems program (leading to a Bachelor of Science in Information Systems). All three programs require a minimum of 136 semester hours of special pre-med course work (Biology, Organic Chemistry, etc.) selected by student and adviser to meet normal admissions requirements of medical schools.

Pre-law students find this option permits a strong technical and legal background. Pre-medical students may elect this option.

A valuable program for students with special needs.

Approved Non-Tech Course

<table>
<thead>
<tr>
<th>Semester IV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MAP 4302</td>
<td>Diff. Equations</td>
</tr>
<tr>
<td>EGN 3343</td>
<td>Thermodynamics I</td>
</tr>
<tr>
<td>EGN 3373</td>
<td>Intro. Elec. Sys.</td>
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<tr>
<td>EGN 3365L</td>
<td>Materials Engr. I</td>
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<tr>
<td>EGN 3433L</td>
<td>Mod. &amp; Analysis</td>
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<table>
<thead>
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<th>Semester V</th>
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<tbody>
<tr>
<td>EMC 3103</td>
<td>Thermodynamics II</td>
</tr>
<tr>
<td>EMC 3117</td>
<td>Transport Proc. I</td>
</tr>
<tr>
<td>EMC 3301</td>
<td>Inst. Sys.</td>
</tr>
<tr>
<td>CHM 3210</td>
<td>Organic Chem. I</td>
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<tr>
<td>EGN 3321</td>
<td>(For Mechanical Engineers) Dynamics</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Semester VI</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>EMC 3303</td>
<td>(For Chemical Engineers) Chem &amp; Mech Lab II</td>
</tr>
<tr>
<td>EMC 4118</td>
<td>Transprt Proc II</td>
</tr>
<tr>
<td>EML 3500</td>
<td>Mach Anal &amp; Des I</td>
</tr>
<tr>
<td>EMC 4411</td>
<td>Computer Sim. I</td>
</tr>
<tr>
<td>CHM 3210L</td>
<td>Org. Chem. I Lab</td>
</tr>
<tr>
<td>CHM 3211</td>
<td>Org. Chem. II</td>
</tr>
<tr>
<td>EGN 3375</td>
<td>(For Mechanical Engineers) Intro to Elec Sys III</td>
</tr>
<tr>
<td>EML 3264</td>
<td>Kinematics</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Semester VII</th>
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<tbody>
<tr>
<td>EMC 4314</td>
<td>Auto Controls I</td>
</tr>
<tr>
<td>EMC 4522L</td>
<td>Chem. &amp; Mech. Lab II</td>
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<tr>
<td>CHM 3211L</td>
<td>Org. Chem. Lab II</td>
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<tr>
<td>CHM 4412</td>
<td>Phys. Chem. III</td>
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<table>
<thead>
<tr>
<th>Semester VIII</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>ECH 4413</td>
<td>Sep. Proc. &amp; Ph Equi</td>
</tr>
<tr>
<td>CHM 3211L</td>
<td>Org. Chem. Lab II</td>
</tr>
<tr>
<td>CHM 4412</td>
<td>Phys. Chem. III</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>
hours of course work, of which 94 hours are common to all options and 42 hours represent the particular area of specialization.

The Computer Engineering program emphasizes the design and utilization of computer systems and has a core of engineering and basic science courses like those of other engineering programs outside the Department of Computer Science and Engineering. The Computer Science program deals with the basic and formal aspects of computation. The Information Systems program emphasizes the business applications and data processing aspects of computing.

Graduates from these programs follow fruitful careers in either scientific or business application of computers, as well as in the design of computer systems. They are often involved in the systems level definition of information processing complexes for both manufacturers of computers and for users. A wide and expanding variety of design and applications opportunities characterize this field. This is the reason for requiring a broad foundation in applied mathematics and the physical sciences, and also to develop communications abilities and clear perceptions in the social sciences and the humanities. Research and development opportunities as a computer scientist and engineer, often following graduate training, are present in the areas of artificial intelligence, software engineering, digital data communications, data-base management and robotics, fault-tolerant computing and testing, microprogramming, computer graphics and simulation.

The schedules which follow indicate how a serious well prepared student who can devote full time to course work can satisfy degree requirements in four academic years. Students without a solid foundation and those who cannot devote full time to academics should plan on a slower pace.

**Bachelor of Science in Computer Science Curriculum**

**Semester I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1104</td>
<td>Freshman English</td>
<td>3</td>
</tr>
<tr>
<td>MAC 3281</td>
<td>Engr. Calculus I</td>
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<td>EGN 1002</td>
<td>Engr. Orientation</td>
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<td>Science Elective</td>
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<tr>
<td>Humanities / Social Sciences</td>
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<td>7</td>
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**Semester II**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hrs</th>
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<tbody>
<tr>
<td>ENC 1104</td>
<td>Freshman English</td>
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</tr>
<tr>
<td>MAC 3282</td>
<td>Engr. Calculus II</td>
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</tr>
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<td>PHY 3040</td>
<td>Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3040L</td>
<td>Physics I Lab</td>
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</tr>
<tr>
<td>PHS 3102</td>
<td>Prob. Gen. Physics</td>
<td>1</td>
</tr>
<tr>
<td>EGN 2210</td>
<td>Fortran for Engr.</td>
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<tr>
<td>Science Electives</td>
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**Required Summer Term**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>Humanities / Social Science</td>
<td></td>
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<tr>
<td>COP 3120</td>
<td>Sc Cobol Prog.</td>
<td>3</td>
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**Semester III**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hrs</th>
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<tbody>
<tr>
<td>MAC 3283</td>
<td>Eng. Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3041</td>
<td>Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3041L</td>
<td>Physics II Lab</td>
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</tr>
<tr>
<td>PHS 3103</td>
<td>Prob. Gen. Physics II</td>
<td>1</td>
</tr>
<tr>
<td>Engr. Core Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>GEB 3211</td>
<td>Business Commun.</td>
<td>3</td>
</tr>
<tr>
<td>Approved Non-Tech Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
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</tbody>
</table>

**Semester IV**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hrs</th>
</tr>
</thead>
<tbody>
<tr>
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**Bachelor of Science in Information Systems Curriculum**

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### Bachelor of Science in
Computer Engineering Curriculum

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#### 4. Electrical Engineering (32 credit hours)

Students pursuing the Electrical Engineering Option of the Bachelor of Science in Engineering program or the Bachelor of Science in Electrical...
Engineering program take designated, specialized course work in network analysis, electronics, communications, electromagnetic theory, linear system and control system analysis, and microelectronics. This course work is supplemented by electives in logic, sequential circuits, digital system design and microprocessors; distributed networks and UHF principles, and/or electromechanics and power system analysis.

Students completing this program normally pursue industrial careers in the power, electrical, electronic, or information industries or in related governmental laboratories and public service agencies. The electrical graduate may apply his/her knowledge to such diverse areas as television, communications, remote guidance, sensing (of people, vehicles, weather, crops, etc.), automation, computer and information systems, electric power generation and transmission, electrically propelled transportation, etc. The graduate may do this by performing needed engineering functions related to the research and development (often requires also an advanced degree), design, production, operation, sales, or management of these products/services.

The schedules which follow indicate how a serious well prepared student who can devote full time to course work can satisfy degree requirements in four academic years. Students without a solid foundation and those who cannot devote full time to academics should plan on a slower pace.

Bachelor's Curriculum for Electrical Engineering

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5. Industrial Engineering (32 credit hours)

Students pursuing the Bachelor of Science in Industrial Engineering degree program take designated, specialized coursework in industrial processes, production control, production design, operations research, human factors, computer simulation, applied statistics, and automation. This coursework is supplemented by engineering electives and comprehensive industrial engineering design projects.

Students completing this program are prepared for graduate study or for careers in a broad range of industries, businesses, and public service areas. The strength of industrial engineering lies, in part, in its breadth and the applicability of its common body of knowledge in a wide variety of enterprises. Students may be involved in traditional areas of manufacturing and production, or state-of-the-art functions in automation and robotics. The same engineering principles are also applied to business organizations, service delivery systems, and governmental administration.

The schedule which follows indicates how a serious well prepared student who can devote full time to course work can satisfy degree requirements in four academic years. Students without a solid foundation and those who cannot devote full time to academics should plan on a slower pace.

Bachelor's Curriculum for Industrial and Management Systems Engineering

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hrs.</th>
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</thead>
<tbody>
<tr>
<td>Semester I</td>
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<tr>
<td></td>
<td>MAC 3281</td>
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<td>EGN 1115L</td>
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<td>Humanities</td>
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<td>Social Science</td>
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<tr>
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</table>
Students completing this option normally enter careers as design, consulting, research and development, or sales engineers in a wide range of industries which either turn out mechanical products or rely on mechanical machines, devices, and systems. Thus, mechanical engineering graduates may follow careers in such fields as transportation, power generation and conversion, instrumentation, automatic control, machine design and construction, refrigeration, heating, and air conditioning. These opportunities occur in many industries because mechanical processes are required for most industrial production.

The programs for Chemical Engineering and Mechanical Engineering are offered by one unit, the Chemical and Mechanical Engineering Department. Much of the course work is common to the two programs as indicated in the curricula listed under paragraph 2. This provides an opportunity for a student to complete the requirements for both degrees with approximately thirty carefully chosen additional hours.

### 7. Structures, Materials and Fluids (Department of Civil Engineering and Mechanics)

Students pursuing the Structures, Materials and Fluids Option of the Bachelor of Science in Engineering program or the Bachelor of Science in Civil Engineering program take designated traditional civil engineering and engineering mechanics course work in solid mechanics, stress analysis, structures, materials, hydraulics, geotechnical, transportation, water resources, and engineering analysis. This course work is supplemented by courses in one of the following areas of concentration, plus electives.


b. **Materials** concentration — courses in engineering materials, polymers, corrosion and materials processes.

c. **Structural Engineering** concentration — courses in structural analysis design, composite structures, connecting matrix and computer techniques.

d. **Water Resources** concentration — courses in water resources, hydraulics, and urban water systems.

Students completing this option enter careers as engineers in the civil, structural, sanitary, environmental, hydraulics, materials, engineering mechanics, aeronautical, etc., disciplines. All of these fields share the need for knowledge in the areas of engineering mechanics, civil engineering, and materials science. Through choice of the proper area of concentration the student has the opportunity to channel his academic studies specifically towards his/her career choice. **Structures, Materials and Fluids** (or Civil Engineering) students commence their engineering careers in either industry, with engineering consulting firms, or in public service at the federal, state or local level. Initial assignments include planning, design and implementation of water resources, transportation and housing systems; regional planning, design and management for abatement of air; water and solid waste pollution problems; research and development of new materials, material processes and testing procedures; design of bridges, single and multistory structures; supervision of construction projects.

The schedules which follow indicate how a serious well prepared student who can devote full time to course work can satisfy degree requirements in four academic years. Students without a solid foundation and those who cannot devote full time to academics should plan on a slower pace.

### Bachelor's Curriculum for Engineering Mechanics Structures, Materials & Fluids Option

<table>
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<tr>
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### Semester III

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<td>EGN 3365L Materials Engineering I</td>
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### Semester IV

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<td>EGN 3373 Electrical Systems I</td>
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### Semester V

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### Semester VI

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<td>ESI 4314 Operations Research I</td>
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<tr>
<td>EIN 4251C Automation and Robotics</td>
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<tr>
<td>ESI 4221 Statistical Quality Ctrl</td>
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<td>EIN 4312L Production Design I</td>
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<td>EGN 3343 Thermodynamics</td>
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<td>EGN 3354 Basic Fluid Mechanics</td>
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### Semester VII

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<tr>
<td>ESI 4315 Operations Research II</td>
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<tr>
<td>EIN 4334 Production Control I</td>
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<td>ESI 4244 Design of Experiments</td>
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<td>EIN 4313 Production Design II</td>
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### Semester VIII

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<td>EIN 4335 Production Control II</td>
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<td>ESI 4911 Senior Project</td>
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<td>ESI 4521 Ind Syst Simulation</td>
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<td>EIN 4364L Plant Facilities Design</td>
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<td><strong>Total</strong></td>
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</tbody>
</table>

### 6. Mechanical Engineering

Students pursuing the Bachelor of Science in Mechanical Engineering program take designated, specialized course work in thermodynamics and heat transfer; physical measurements and energy conversion; machine analysis and design; mechanical design and controls; and fluid machinery. This is supplemented by elective coursework in such areas as power plant analysis, refrigeration and air conditioning; acoustics; lubrication; and vibration and balancing.

Students completing this option normally enter careers as design, consulting, research and development, or sales engineers in a wide range of industries which either turn out mechanical products or rely on mechanical machines, devices, and systems. Thus, mechanical engineering graduates may follow careers in such fields as transportation, power generation and conversion, instrumentation, automatic control, machine design and construction, refrigeration, heating, and air conditioning. These opportunities occur in many industries because mechanical processes are required for most industrial production.

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### Bachelor's Curriculum for Engineering Mechanics Structures, Materials & Fluids Option

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester I</strong></td>
<td></td>
</tr>
<tr>
<td>ENC 1101 Freshman English</td>
<td>3</td>
</tr>
<tr>
<td>MAC 3281 Engr Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>CHM 2045 General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>EGN 1002 Engr Orientation</td>
<td>0</td>
</tr>
<tr>
<td>EGN 1115L Intro Design Graphics</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Social Science</td>
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<tr>
<td><strong>Total</strong></td>
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<tr>
<td>Semester</td>
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<td><strong>Fall</strong></td>
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<td>EGN 1104</td>
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<td>Gen. Chemistry I Lab</td>
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<td>PHY 3040L</td>
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<td>MAC 3283</td>
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<td>EGN 3313</td>
<td>Statics</td>
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<tr>
<td>EGN 3365L</td>
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<tr>
<td>EGN 4450</td>
<td>Intro to Linear Sys. Humanities/Social Science</td>
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<tr>
<td>EGN 3443</td>
<td>Eng. Statistics I</td>
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<td><strong>Total</strong></td>
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</tbody>
</table>

| **Spring** | | |
| EGN 3354C | Basic Fluid Mech. | 3 |
| EGN 3433L | Modeling & Analysis | 3 |
| EGN 3331 | Mechanics of Matls. | 3 |
| EGN 3374 | Intro to Elec. Sys. II | 3 |
| PHY 3123 | Modern Physics | 3 |
| EGN 3613 | Engr Economy I | 3 |
| **Total** | | 18 |

| **Sophomore Year** | | |
| **Fall** | | |
| CES 4001 | Structures I | 3 |
| EGN 4420 | Num Mthd of Analysis | 3 |
| EGN 4355 | Compressible Flow | 2 |
| CES 4014 | Adv Mechanics of Matls | 2 |
| EGN 3331L | Mechanics of Matls Lab | 1 |
| ENV 3001 | Soc Aspects of Env Eng | 3 |
| EGM 4430 | Shock and Vibration | 2 |
| **Total** | | 17 |

| **Spring** | | |
| CES 4002 | Matrix Struc Analysis | 3 |
| ECI 4311 | Soil Mechanics I | 3 |
| EAS 4121 | Hydro & Aero Mech | 3 |
| GEB 4935 | Tech Writing for C.E. Mechanics Elective** | 3 |
| **Total** | | 17 |

| **Junior Year** | | |
| **Fall** | | |
| CES 4208 | Structural Dynamics | 3 |
| **Design Elective** | | |
| **Total** | | 15 |

| **Spring** | | |
| CES 4001 | Structures I | 3 |
| EGM 4816 | Hydraulics | 3 |
| EGM 4430 | Shock & Vibrations | 2 |
| EMA 4324 | Corrosion Engr Mat I | 3 |
| ENV 3001 | Soc Aspects of Env Eng | 3 |
| GLY 3830 | Geology for Engineers | 3 |
| **Total** | | 17 |
### Bachelor's Curriculum for Environmental Engineering

#### Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENC 1101</td>
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#### Semester II

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<td>CHM 2045</td>
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<td>EGN 2210</td>
<td>Fortran for Engineers</td>
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#### Semester III

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<td>PHY 3040</td>
<td>Gen. Physics I</td>
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<td>PHY 3041L</td>
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<td>EGN 3613</td>
<td>Engr Economy I</td>
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<td>PAD 3003</td>
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#### Semester IV

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<tr>
<td>ENV 3001</td>
<td>Soc Aspects Env. Engr.</td>
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#### Semester V

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<td>CHM 3210</td>
<td>Organic Chemistry I</td>
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<td>EGN 3354C</td>
<td>Basic Fluid Mech.</td>
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**Minimum 6 hours each in Areas II and V.**

---

The below listed courses are approved electives; any other electives must be approved by an advisor.

**Engineering Electives (min. 12 hrs)**

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<tr>
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<td>Materials Engr I</td>
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<tr>
<td>EGN 3433L</td>
<td>Modeling &amp; Analysis</td>
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<td>EMC 3117</td>
<td>Transport Processes I</td>
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<td>EMC 4118</td>
<td>Transport Processes II</td>
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<td>Sep Proc &amp; Phase Equil</td>
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<td>ECH 4415C</td>
<td>Reac Sys &amp; Chem Equil</td>
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<tr>
<td>CES 4403</td>
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<td>CES 4001</td>
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<td>ECI 4610</td>
<td>Soil Mechanics I</td>
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<tr>
<td>ECI 4640</td>
<td>Geotechnical Design</td>
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<tr>
<td>CES 3400</td>
<td>Design Prin &amp; Practices</td>
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<tr>
<td>EGN 4355</td>
<td>Compressible Flow</td>
<td>2</td>
</tr>
<tr>
<td>ESI 4314</td>
<td>Operations Res I</td>
<td>3</td>
</tr>
<tr>
<td>ESI 4521</td>
<td>Computer Simulation</td>
<td>3</td>
</tr>
<tr>
<td>EMC 5651</td>
<td>Indus Air Pol Control</td>
<td>3</td>
</tr>
</tbody>
</table>

**Science Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB 5306C</td>
<td>Limnology</td>
<td>4</td>
</tr>
<tr>
<td>APB 3110</td>
<td>Man, Microbe &amp; Molecule</td>
<td>3</td>
</tr>
</tbody>
</table>
8. Other Options

Students should recognize that the title of an academic program to prepare for a specific engineering career may differ from the career title. The USF Bachelor of Science in Engineering degree option titles or the Bachelor of Science in a Designated Engineering Field degree titles are descriptive of the academic discipline the specialization studies draw on. The field of product or engineering application frequently is used in describing engineering career titles. The following table may help prospective students to identify desired USF programs.

<table>
<thead>
<tr>
<th>Engineering Career</th>
<th>USF Field/Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace</td>
<td></td>
</tr>
<tr>
<td>Biomedical</td>
<td></td>
</tr>
<tr>
<td>Civil</td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td></td>
</tr>
<tr>
<td>Engineering Mechanics</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
</tr>
<tr>
<td>Petroleum</td>
<td></td>
</tr>
<tr>
<td>Solar Energy</td>
<td></td>
</tr>
<tr>
<td>Materials and Fluids</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td></td>
</tr>
<tr>
<td>Materials, and Fluids</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td></td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td></td>
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<tr>
<td>Chemical Engineering</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td></td>
</tr>
</tbody>
</table>

FIVE-YEAR-PROGRAM—MASTER OF SCIENCE IN ENGINEERING DEGREE

This program permits qualified students to simultaneously pursue the senior year of an undergraduate program and master’s level work. Under this program additional calendar time is available for design or research projects. The degree requirements are minimum of thirty semester hours of work (of which a maximum of six may be for a research or design project) beyond bachelor’s degree requirements. A student may be admitted to this program after a favorable evaluation by his/her department chairman or graduate program adviser.

The program leads concurrently to both the Master of Science in Engineering degree and the Bachelor of Science in Engineering degree (or alternately the Master of Science and the Bachelor of Science in a Designated Engineering Field degrees) with the specialization phase of the program being individually arranged and involving course work, design, research and/or operational experience. Should the student be unable to complete the full master’s degree requirements, the baccalaureate can be awarded provided the requirements for that degree have been met. Either an engineering report or a research thesis is required. See later section relative to master’s program for additional information.

College Regulations

1. Humanities and Social Science Requirements

While the Engineering undergraduate student is expected to complete certain requirements during the first two years of study which are directed toward the humanities and social sciences, and which are fulfilled by the completion of the Distribution requirements of the University (or general education requirements at other institutions), the College of Engineering expects more of its prospective engineering graduates than this minimum. The engineer must not only be a technically competent individual, but must also be a person who can understand, adjust and contribute to the social environment.

Students who transfer from a state of Florida community college with an Associate of Arts degree and who have met that college’s General Education Requirement will normally find that their General Education course work satisfies the major portion—but not all—of the Social Science and Humanities Core Requirements.

2. English Requirement

Students who have been admitted to the College of Engineering may be required to take an examination in order to evaluate their preparedness in the use and understanding of the English language. The examination will be administered by the faculty of the University’s English program.

Students evidencing an English deficiency will be required to initiate the necessary corrective programs, with the assistance of their advisers. It is recognized that such deficiencies can exist even though a student has met the University’s minimum English language requirements. Correction of any deficiency must commence the term after a student has been notified and must be completed prior to recommendation of the student for graduation by the faculty of the college.

See Continuation Requirements for minimum grade requirements.

3. Mathematics Requirement

Students who are pursuing an engineering program are expected to acquire a facility for the rapid and accurate solution of problems requiring the use of mathematics. This requirement includes the ability to translate physical situations into mathematical models. Students evidencing a lack of manipulative ability or of the ability to apply mathematics will be required to take remedial course work in engineering analysis and problem solving that is over and above their regular degree requirements. Faculty of the college who encounter students who are deficient in their mathematical ability will refer such cases to the Office of the Dean.

4. Continuation Requirements

All undergraduate students registered in the College of Engineering are expected to maintain the minimum of 2.0 average (“C” average) for all work attempted while registered in the college, as well as a minimum 2.0 average for all Engineering course work attempted of 3000 level or above, or the more stringent requirements of specific limited access programs, where applicable. Students who do not maintain this requirement will be declared ineligible for further registration for course work and degree programs in the college unless individually designed continuation programs are recommended and have been prepared by the student’s adviser and approved by the academic committee of the college. All students who are academically dismissed from the University will be denied re-admission to the college until they meet entrance requirements. Exception to this rule will be made by the department chairperson.

Key courses, including but not limited to, Freshman English, Calculus, Physics, and Engineering and Science courses in the student’s area of specialization, must be passed with a grade of “C” or better before taking the next course in the sequence.

Transfer credit will be accepted by USF’s College of Engineering if the transferred course has been passed with a satisfactory (“C”) grade or better and when the first USF course following in sequence is also passed with a “C” grade or better.

Students pursuing College of Engineering degree programs are expected to take their courses on a graded (ABCDF) basis. (Exceptions require written approval of department advisor prior to registration.)

Students receiving a “F” grade must remove this deficiency at the first opportunity in accordance with a written agreement between student and instructor.

Continuation in the program after 3 withdrawals and/or failures in a specific engineering course of 3000 level or higher, requires specific approval from the college.

5. Admission to Upper Division Status

State regulations now require that all university students must comply with the 6A-10.30 rule and CLAST requirements as set forth on page 30 before classification as an upper division student.

6. Requirements for Graduation

In addition to the completion of the course work and/or project requirements of the respective program of the college, students must be recommended for their degrees by the faculty of the college. It is expected
that students completing their master's program would have completed their advanced work with a minimum average of 3.0 or "B." Students attempting but not completing their master's requirements through the five-year Masters degree program may elect to request the awarding of the bachelor's degree, provided they have met that degree's requirements.

The college requires that a student complete the Mathematics and Science Core, Engineering Core, and specialization requirements for the baccalaureate degree in seven years. Deviations require specific prior permission from the Dean of the college.

In addition to the college requirements listed above, degree candidates are expected to meet applicable special departmental requirements. Students working on design and research projects must register for a minimum of 2 credits of the course titled "Masters Thesis" in the student's department each semester the staff, facilities, and laboratories of the University are used whether or not the student has accumulated the maximum credit allowed for research or design toward the degree. These students must register for 2 credits of the course titled "Masters Thesis" in the student's department during the semester in which they submit their thesis or project report.

**Engineering Master's Degree Programs**

The College of Engineering offers four professionally oriented programs leading to a degree at the master's level. These are the post-baccalaureate Master of Science in Engineering degree program, the Master of Science in a Designated Engineering Field degree program, Master of Engineering degree program, and the Five-Year Master of Science in Engineering degree program. Each professional department may elect to award one of these degrees depending upon prior arrangements with the student. Admission to a Master's program is dependent upon a favorable evaluation by the department concerned. Applicants are expected to meet the minimum requirements of the University and those outlined below and in addition any special requirements specified by the departments.

**POST-BACCALAUREATE MASTER OF SCIENCE IN ENGINEERING DEGREE**

(Undesignated)

The graduate program of the college is designed for those students wishing advanced study which is research or design oriented and not restricted to a single engineering discipline.

**Entrance Requirements**

1. A baccalaureate degree in Engineering from an approved institution is required. Degrees in Mathematics, Physics, Chemistry and other fields may be accepted on an individual basis to meet this requirement. In such cases it is probable that supplemental remedial work in engineering will be necessary.
2. A minimum total score of 1000 on the verbal and quantitative portions of the Graduate Record Examination and/or a minimum grade point average of 3.0 out of a possible 4.0 for all work attempted during the last two years of undergraduate work is required. Individual departments may have higher standards.
3. Those who do not meet the regular entrance requirements may attempt a trial program as a Special (non-degree seeking) Student (subject to prior approval). Up to 12 hours of work attempted on this basis may be accepted into a graduate program upon satisfactory completion. Before attempting such a trial program the student should determine from the departmental adviser a list of courses and performance criteria for admission.
4. Students whose native language is not English must have at least a score of 550 on the TOEFL exam.

**Program Requirements**

1. A minimum of 30 credits of approved course work is required.
2. An overall grade point average of 3.0 is required for all work attempted in the program. No grade below "C" may be accepted in a graduate program. In the event that a student's average drops below 3.0 the student will be placed on a probationary status and must obtain a directed program from his/her adviser approved by the Dean, prior to continuing course work toward the degree.
3. All students are required to pass a final comprehensive examination which may be written or oral prior to awarding the degree. These examinations are arranged and administered by the student's graduate committee.
4. Students in this program must complete a design or research project on which up to 6 credits may be used to fulfill degree requirements. The course titled "Masters Thesis" in the student's department is to be used.
5. If a thesis is submitted it must be in accordance with the Handbook for Graduate Thesis and Dissertations, University Graduate Council.

**POST-BACCALAUREATE MASTER OF SCIENCE IN A DESIGNATED ENGINEERING FIELD DEGREE**

This graduate program of the College is designed for students wishing advanced study in a specific field of engineering. The following designated programs are offered by the departments listed:

<table>
<thead>
<tr>
<th>Program</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Science in Chemical Engineering</td>
<td>Chemical &amp; Mechanical</td>
</tr>
<tr>
<td>Master of Science in Civil Engineering</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Master of Science in Computer Engineering</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>Master of Science in Computer Science</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Master of Science in Electrical Engineering</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>Master of Science in Engineering Management</td>
<td>Industrial &amp; Management</td>
</tr>
<tr>
<td>Master of Science in Industrial Engineering</td>
<td>Systems Engineering</td>
</tr>
<tr>
<td>Master of Science in Mechanical Engineering</td>
<td>Chemical &amp; Mechanical</td>
</tr>
</tbody>
</table>

**Entrance Requirements**

A bachelor's degree in an ABET accredited engineering program in the field of projected graduate study is expected, where applicable. All other entrance requirements for this program are the same as those for the Post-Baccalaureate Master of Science in Engineering undesignated degree program.

**Program Requirements**

1. A minimum of 30 credits of approved course work is required.
2. An overall grade point average of 3.0 is required for all work attempted in the program. No grade below "C" may be accepted in a graduate program. In the event that a student's average drops below 3.0 the student will be placed on a probationary status and must obtain a directed program from his/her adviser approved by the Dean, prior to continuing course work toward the degree.
3. All students are required to pass a final comprehensive examination which may be written or oral prior to awarding the degree. These examinations are arranged and administered by the student's graduate committee.
4. Students in this program may have to complete a design or research project when invoked by the department on which up to 6 credits may be used to fulfill degree requirements. The course titled "Masters Thesis" in the student's department is to be used.
5. If a thesis is submitted it must be in accordance with the Handbook for Graduate Thesis and Dissertations, University Graduate Council. For design projects a comprehensive report must be filed with the Office of the Dean of Engineering following, where practical, the guidelines of the handbook.

Students working on design and research projects must register for a minimum of 2 credits of the course titled "Masters Thesis" in the student's department each semester the staff, facilities, and laboratories of the University are used whether or not the student has accumulated the maximum credit allowed for research or design toward the degree. These students must register for 2 credits of the course titled "Masters Thesis" in the student's department during the semester in which they submit their thesis or project report.
MASTER OF ENGINEERING DEGREE PROGRAM

This non-thesis degree program is designed primarily to meet the needs of engineers actively engaged in the profession who wish to pursue graduate study at the master's level not covered by the designated Master of Science in Engineering degree.

Entrance Requirements

Entrance requirements for this program are the same as those for the post-baccalaureate Master of Science in Engineering degree program (undesignated).

Program Requirements

1. A minimum of 30 credits of approved course work is required.
2. Students must maintain overall grade point average of 3.0 out of possible 4.0. No grade below "C" will be accepted in a graduate program. In the event that a student's average falls below 3.0 the student will be placed on probationary status and must obtain a directed program from his/her adviser and approved by the Dean prior to continuing further course work toward the degree.
3. All students are required to pass a final comprehensive examination which may be written or oral prior to awarding the degree. These examinations are arranged and administered by the student's department.
4. Students in this program must register for and take a comprehensive examination during the semester in which they apply for the degree. This credit may not be used as part of the course work requirement.
Contact department for details.

THE ENGINEERING FIVE-YEAR MASTER'S DEGREE PROGRAM

This program consists of a minimum of 166 credits of course work and results in concurrent awards of the Bachelor of Science and Master of Science in Engineering degrees, or Bachelor of Science and Master of Science in a Designated Engineering Field degrees. Unlike traditional master's programs following the baccalaureate degree, in this program both the fourth and fifth years are open to graduate level study so that additional calendar time is available for research or design projects.

Entrance Requirements

1. Students who have senior standing (90 credits) with at least 16 upper level engineering credits completed at the University of South Florida in their engineering curriculum may apply for admission to the Five-Year Program.
2. A minimum total score of 1000 on the verbal and quantitative portions of the Graduate Records Examination is expected.
3. Above-average performance in the engineering program is expected.
4. Students apply for admission to this program through their department. They should consult their adviser when they need additional information.

Program Requirements

1. A minimum of 166 credits of approved course work must be compiled. Of this total, 104 credits must comprise the engineering central core with an additional 62 credits of specialization. A maximum of 12 credits may be allowed for degree and research.
2. Students admitted to the five-year program are expected to maintain a superior level of academic performance. A 3.0 out of a possible 4.0 grade point average is expected in the courses constituting the student's graduate program. A student in the Five-Year Program who fails to maintain the required academic standards will be placed on probation. Failure to comply with the terms of the probation will result in the student being dropped from the program.
3. Students in this program must complete a design or research project of which up to 6 credits of 4000 level project course work of appropriate departmental prefix and up to 6 credits of the course titled "Masters Thesis" in the student's department may be used to fulfill degree requirements.
4. If a thesis is submitted it must be in accordance with the Handbook for Graduate Thesis and Dissertations, University Graduate Council. For design projects a comprehensive report must be filed with the Office of the Dean of Engineering, following where practical the guidelines of the handbook.
5. All students are required to pass a final comprehensive examination which may be written or oral prior to awarding the degree. These examinations are arranged and administered by the student's graduate committee.

DOCTOR OF PHILOSOPHY DEGREE IN DESIGNATED ENGINEERING FIELD

The Doctor of Philosophy degree is awarded in recognition of demonstrated proficiency and high achievement. It is altogether a different type of educational endeavor than that of the Baccalaureate or even Master's programs. The Ph.D. degree cannot be gained merely by diligent application to a prescribed course of study over a period of years, nor can it be awarded for miscellaneous study. After adequate fundamental preparation the student must complete a searching and authoritative investigation of a special area of the field of his/her choice, culminating a written dissertation covering that investigation. The dissertation must demonstrate that the student possesses considerable power of original thought, talent for research and ability to organize and present his findings.

Entrance Requirements

1. An undergraduate degree in engineering or the sciences with a minimum GPA of 3.0 in junior-senior work in the major area of concentration.
2. A minimum GRE score of 1000 (verbal and quantitative).
3. Applicants who do not hold a bachelor's degree from an ABET (formerly ECPD) accredited program may be required to show proficiency in areas of the undergraduate Engineering Sciences designated by the department or departments associated with the applicant's research area. An area of concentration is defined as a coherent group of engineering studies but not necessarily located within a single department.
4. Individual departments may have higher standards.
5. Students whose native language is not English must have a score of at least 550 on the TOEFL exam.

Program Requirements

1. An adviser or an Advisory Committee will be appointed by the chairman of the appropriate department or program for each student during the first semester of registration at the University of South Florida. This adviser of committee will assist in determining the student's area of research interest and to initially delineate preliminary course assignments. At the earliest possible date a Supervisory Committee is appointed which will serve as the Dissertation Committee. It prepares the student's program and has a full responsibility for preparing (or having prepared under its supervision) the individual's qualifying examination. The Supervisory Committee consists of a minimum of five members, one external to the College of Engineering. A majority of the committee will be from the College of Engineering with at least two departments represented from the college.
2. A total of 90 semester hours minimum beyond the baccalaureate degree (including dissertation research) is required with a minimum of 27 hours in an engineering area of concentration. The 27 hours may not necessarily be course work of the same department but must focus directly upon the area of concentration and at least 20 hours must be at the 6000 level. A minimum of 8 hours of mathematics or statistics is required. Engineering mathematics may be approved by the committee if appropriate. In addition, a minimum of 8 hours of course work as defined by the committee outside the major area of concentration is also required. This may include natural sciences, earth sciences, social sciences, additional statistics, or approved support in other areas of engineering. Further requirements may be imposed by the candidate's committee. At least 8 hours of course work must be taken outside the major departments, if there is a major department.
3. A reading knowledge of two foreign languages. Competence in a computer language or other special work done outside the student's field of concentration may be substituted for one of these when recommended by the student's Dissertation Committee and approved by the Dean of the college.
4. All prospective candidates must pass both parts of a Ph.D. qualifying examination, a general area of mathematics and a prescribed area of
Engineering Science concentration. This examination must be taken after the student has completed appropriate studies usually equivalent to one year's course work. Students entering with a Master's degree must take this examination before the end of the first year after admission to the program.

5. A written and oral Comprehensive Qualifying Examination prepared and administered by the Dissertation Committee will be taken by each Ph.D. student as soon as a substantial majority of the coursework is completed. Completion of this requirement admits the student to candidacy.

6. The defense of the dissertation will be in accordance with the University's general rules and regulations.

7. A minimum residence requirement may be satisfied by completing at the University of South Florida beyond the master's degree or equivalent the following: (1) the University's minimum requirement, or (2) 24 semester hours in one calendar year, or (3) 30 semester hours in no more than 4 semesters within a period of 3 calendar years. Any graduate work counted toward the fulfillment of the requirement of the Ph.D. degree after admission to candidacy must be accomplished within a 7-year calendar period.

8. Throughout the student's program of study, independent learning will be emphasized. For the first time in the participant's career, in most cases, the student will be responsible for mastering a new domain of knowledge without the aid of organized lectures and textbooks. The principal information source will be the current literature. Such experience is necessary preparation for a meaningful career in engineering and other fields where the participants face the requirements of keeping pace with a large, ever-changing body of knowledge.

9. The student must carry out an investigation of such quality that he/she can either make an independent, or original contribution to the knowledge in his/her field, or a new and better interpretation of facts already known. The requirement of uniqueness means that the dissertation research will provide an important creative experience for the student. Successful completion of this experience makes the Ph.D. program a valuable career preparation for every aspect of the engineering profession. As the final stage of the student's program, he/she must prepare a written dissertation covering the research. Students in the Ph.D. program must take an appropriate number of Doctoral Dissertation credits but not less than 20 semester hours; the exact number is determined by department and/or individual requirements.

10. An all college advanced graduate advisory committee reports to the Dean of the College of Engineering. This committee receives copies of all programs arranged for the students by their advisory committees as well as copies of qualifying examination and examinations for admission to candidacy. This committee provides recommendations to the Dean, department heads, and advisory committees relative to programs, procedures and examinations.

APPLIED SCIENCE (ENGINEERING)

Degree programs in Engineering Science are offered by the College of Engineering Science which are designed for students who wish to obtain a strong technical background coupled with other interests. Engineering Science is an applied science discipline which relates to new and innovative areas of endeavor at the frontiers of technological development and research. It represents a marriage between basic science and its utilization in such varied fields as computer science, mathematics, economics, environmental sciences, and computer engineering. The common denominators to this wide range of subjects is a strong foundation in rigorous scientific and engineering principles and practices.

This training provides a most desirable background for graduate study in the areas of concentration mentioned and in other professional areas such as law, medicine, and business.

Preparation for Engineering Science

Students anticipating pursuit of studies in Engineering Science should follow the guidelines given for Engineering in this catalog when planning their high school and/or community college studies.

Admissions to Engineering Science

Admissions requirements and procedures are the same as for Engineering. See Admission To College, page 105-106.

Engineering Science Advising

Students pursuing a course of study in Engineering Science are assigned to an adviser who is familiar with the requirements of this program and whose special interests match the student's specialization objectives. Comments and requirements spelled out in the section of Engineering Advising in this catalog are applicable to this program.

FOUR-YEAR PROGRAM—BACHELOR OF SCIENCE IN ENGINEERING SCIENCE DEGREE

The College of Engineering offers a curriculum leading to the Bachelor of Science in Engineering Science degree which stresses the scientific aspects of engineering. The curriculum is a four year program with a minimum requirement of 120 semester hours, and it provides the student with an unusual depth of study in mathematics, science, and engineering without limiting the opportunities to broaden one's education in humanities and social sciences. The exact composition of the curriculum followed by a given student is determined by the student with the advice and consent of the academic adviser, and based on the option chosen.

An option in Applied Mathematics covers applied analytical techniques to establish a more fundamental understanding of basic physical phenomena leading to engineering applications. Areas of mathematics considered from an applied viewpoint include modern algebra, theory of algorithms, classical advanced calculus, complex variable, probability and statistics, numerical procedures, approximation theory, operations research, and applied mathematical programming. The use of computers is emphasized. This program provides the student with an opportunity that is not available in either a pure mathematics curriculum or a design-oriented engineering program.

The Civil Engineering and Mechanics department offers an option in Environmental Engineering Science designed for students who desire to develop the broad interdisciplinary background necessary for careers in environmental protection with industry and government. Training is provided in the sociological sciences of politics, government, and social sciences; the communications arts (speaking and writing); and the scientific and technological aspects of air, water, and noise pollution.

Other options are designed for such areas of Ocean and Energetics.

Baccalaureate Requirements (minimum 120 credit hours)

The Bachelor of Science in Engineering Science degree program requires a strong foundation in mathematics and science, foundation course work in the humanities, social sciences, and other non-technical areas, a basic knowledge of engineering fundamentals, and culminates in approximately one year of specialized—often interdisciplinary—studies. These basic requirements are further listed below.

1. Humanities, social science, and other non-technical areas requirements (29)
2. Mathematics and science requirements (30)
3. Engineering Science core requirement (29)
4. Specialization requirement (32)

Other Requirements for Engineering Science

The College's English, Mathematics, Continuation, and Graduation requirements for the Engineering degree program are applicable to the Engineering Science degree program.
■ FIVE-YEAR PROGRAM—MASTER OF SCIENCE IN ENGINEERING SCIENCE DEGREE

Students who at the beginning of their senior year are clearly interested in graduate study are invited to pursue a five-year program of study leading simultaneously to the Bachelor of Science in Engineering Science and Master of Science in Engineering Science degrees. The keys to this program are:

1. A two-year research program extending through the fourth and fifth year.
2. The opportunity of taking graduate courses during the fourth year and deferring the taking of senior courses to the fifth year. The requirements or the combined degrees do not differ from those for the two degrees pursued separately.

Students apply for admission to this program through their adviser, who should be consulted when additional information is needed. General requirements include:

1. Senior standing (90 credits) with at least 16 upper level engineering credits completed at the University of South Florida in the engineering science curriculum.
2. A minimum score of 1000 on the verbal and quantitative portions of the Graduate Records Examination is expected.
3. Above-average performance in the engineering science program is expected.

■ POST-BACCALAUREATE—MASTER OF SCIENCE IN ENGINEERING SCIENCE DEGREE

The admission and program requirements (minimum 30 credit hours) for this degree are essentially the same as those itemized for the Engineering Master's Degree Programs, page 116.

To meet the student's specific Engineering Science objectives, each department, or college, may elect to award this degree dependent of prior arrangement with the student.

Students with interests in Bio-medical engineering should have a well above average undergraduate preparation in one of the traditional fields of engineering.

■ DOCTOR OF PHILOSOPHY DEGREE IN ENGINEERING SCIENCE

This program is designed to meet the needs of students desiring to pursue doctoral studies in fields of competence of the college which are not covered by the Doctor of Philosophy Degree in a Designated Engineering Field program. The same general conditions, entrance requirements, and program requirements are applicable. See page 117.

■ ENGINEERING TECHNOLOGY

The College of Engineering offers a program leading to the degree of Bachelor of Engineering Technology to serve educational needs in engineering-related technology areas, including Computer Technology. The program normally provides for two years (60 min. credit hours) of study at the University of South Florida following two years (60 credit hours) of successful study in an engineering technology program which has led to an Associate of Science degree. Many Engineering Technology programs in the State System of Community Colleges uniquely mate with this program.

■ BACHELOR OF ENGINEERING TECHNOLOGY

Upon completion of their full four years of study leading to the award of the Bachelor of Engineering Technology degree, students will have gained a well-rounded background concentrated in the following areas: Engineering Technology, Mathematics and Science, Liberal Arts and Social Science, and Management and the area of Computers. A student who has completed this program should be adequately prepared to assume career responsibilities in technical, technical supervisory, or technical executive positions. Prospective students should note, however, that this program is not intended to be an engineering program. Rather, its function is to bridge the gap between design or research professional engineers, technicians and management. It is for this reason that the program consists of a balance of course work in technical management, and Liberal Arts and Social Science areas.

A typical student pursues the bulk of the Engineering Technology course work, together with much of the mathematics and science course work within the framework of a junior college Associate of Science degree engineering technology program. Most of the Liberal Arts and Social Science course work, Management and Computer-oriented studies, and some additional engineering technology course work is taken by the student at USF during the junior and senior year. The typical four years of study thus exhibit approximately the following course work distribution (in credit hours):

<table>
<thead>
<tr>
<th>Course Area</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Technology</td>
<td>53</td>
</tr>
<tr>
<td>Management &amp; related studies</td>
<td>20</td>
</tr>
<tr>
<td>Liberal Arts, Social Science and Electives</td>
<td>32</td>
</tr>
<tr>
<td>Mathematics and Science</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

Specific students' programs may deviate from this balance to some extent due to the differences in the students' first two years' program contents.

At USF a portion of each student's program may be used for one of the areas of concentration listed below.

- Computer Systems Technology
- Management Engineering Technology

These areas are designed to complement the technical work received at the community college and need not necessarily be in the same field in which the A.S. degree is awarded.

Students entering this program will have their transcript annotated as to the institution from which their technical training was received as well as their technical specialization as designated by that institution.

Also available is a four-year degree in Computer Systems Technology which is mainly software applications.

**Admission**

In general, students are expected to have successfully completed an Associate of Science degree in Engineering Technology at a community college or to have accomplished equivalent work. The student must have completed a minimum of mathematics through applied integral calculus, a non-calculus physics sequence, and at least 6 semester hours of Freshman English. Limited resources in the presence of increasing enrollment demand have forced limiting enrollment to this program. The College's admissions requirements and procedures are listed on page 105. Students who meet all admission requirements are required to complete a minimum of 60 additional semester hours to receive the Bachelor of Engineering Technology degree.

**Bachelor of Engineering Technology**

*(A.S. *degree plus 60 Semester Hrs.)*

*One year non-calculus physics and one year calculus required if not completed in A.S. degree.*

**Areas of Concentration:**

- A) Computers
- B) Management

**Junior Year:**

<table>
<thead>
<tr>
<th>Course Area</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COC 3300  Introduction to Computers I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 2243  Elementary Calc I</td>
<td>3</td>
</tr>
<tr>
<td>COP 3110  FORTRAN</td>
<td>3</td>
</tr>
<tr>
<td>ECO 2023  Economic Principles (Microeconomics)</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3613  Engineering Economy I</td>
<td>3</td>
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**Semester I**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Engineering Technology</td>
<td>53</td>
</tr>
<tr>
<td>Management &amp; related studies</td>
<td>20</td>
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<tr>
<td>Liberal Arts, Social Science and Electives</td>
<td>32</td>
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<tr>
<td>Mathematics and Science</td>
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<td><strong>Total</strong></td>
<td><strong>120</strong></td>
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</table>
### Bachelor's Curriculum for Computer Technology

#### Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Hrs</th>
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<tbody>
<tr>
<td>ENC 1101</td>
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<tr>
<td>MAC 2243</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2001</td>
<td>3</td>
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<tr>
<td>COP 3300</td>
<td>3</td>
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#### Semester II

<table>
<thead>
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<td>ENC 1104</td>
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<tr>
<td>MAC 2244</td>
<td>4</td>
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<tr>
<td>ACG 2001</td>
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<tr>
<td>COP 3110</td>
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#### Semester III

<table>
<thead>
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<tr>
<td>PHY 2051L</td>
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</tr>
<tr>
<td>CDA 3101</td>
<td>3</td>
</tr>
</tbody>
</table>

### Other Requirements

The following supplemental requirements listed on page 105 are applicable to this program.

- **English Requirement**
- **Mathematics Requirement**
- **Continuation Requirement**

Note that key courses, including but not limited to, Freshman English, Calculus, Physics, Engineering, and Science courses in the student's area of specialization, must be passed with a grade of "C" or better before taking the next course in the sequence.

In addition to the completion of the course work to the college, students must be recommended for their degrees by the faculty of the college. The awarding of a baccalaureate degree also requires a minimum average of 2.0 or "C" for all engineering course work of 3000 level or above attempted while registered in the college.
Location
The course work for this program is offered on both the Tampa campus and the St. Petersburg campus. On occasion, it may be necessary for a student at the St. Petersburg campus to go to the Tampa campus for a specific course, or vice versa. It should be noted that the St. Petersburg campus does not have dormitory facilities and the students must arrange to live off campus. The Center Administrator of the St. Petersburg campus will assist where possible in locating housing.

Computer Service Courses
These course marked SC are specifically designed for the non-engineering student.

Recognizing that the general purpose digital computer has made significant contributions to the advancement of all elements of the academic community and that it will have an ever greater impact in the future, the College of Engineering offers several levels of credit course work, undergraduate and graduate, to serve students of all colleges in order that they may be prepared to meet the computer challenge.

Computer-oriented courses are offered in two broad categories: (1) those courses which are concerned with the operation, organization and programming of computers and computer systems from the viewpoint of examining the fundamental principles involved in computer usage; and (2) those courses which are concerned with computer applications to a variety of different disciplines, by means of user-oriented-languages such as FORTRAN, PI/1, COBOL, PASCAL, and BASIC.

Students in engineering, the physical sciences, and mathematics must consult their adviser for suitable computer courses, since these courses are not acceptable to a number of degree programs.

College Facilities
Students have access to the University's IBM 3033 system and the College's extensive Prime 750 fing network computer system in support of their course work. In addition, the College has a wide range of specialized equipment, such as a thin-film and hybrid circuits facility, a high-current test facility, a gas chromatograph/mass spectrometer, specialized computers and computer laboratories such as a DEC PDP 1/44 database and a color computer graphics laboratory, a differential thermal analyzer, a vacuum dry box, and X-ray diffraction unit, estuary current meters, water-quality-analysis test equipment, flow visualization equipment, a 250 kip materials testing system, a computer-aided manufacturing system, and industrial robot, and a well-equipped and staffed machine shop.

Cooperative Education Program
A wide variety of industries and government agencies have established cooperative programs for engineering students to provide them the opportunity to become familiar with the practical aspects of industrial operations and engineering careers. Students in the Cooperative Education (Co-op) Program alternate periods of paid employment in their major field with like periods of study. Students following the Co-op program usually encounter no problems in scheduling their program, since required Social Science and Humanities, Mathematics and Science, and Engineering Core courses are offered every semester. Students normally apply for participation in this program during their freshman year and pursue actual Co-op employment during their sophomore and junior years. The senior year is generally pursued on a full-time study basis, since many specialization courses are not offered every semester.

Florida Engineering and Industrial Experiment Station (USF)
The Florida Engineering and Industrial Experiment Station developed from early research activities of the engineering faculty at the University of Florida and was officially established in 1941 by the Legislature. Its mandate is to "organize and promote the prosecution of research to such of these problems as are important to the industries of Florida." In 1977 the University of Florida extended the provisions of the Engineering and Industrial Experiment to the Engineering College of the University of South Florida and the other two State engineering colleges. The legislature supported this extension with an appropriation: The four colleges of engineering now work together in a joint effort through EIES to assist industry with special problems that can be appropriately solved by engineering colleges. During the year 1980-81 a sponsored research volume of approximately 1.5 million dollars passed through EIES (USF). All departments, faculty as well as students, contribute to this research at the University of South Florida. The direct exposure of students to real research needs of the State adds extra meaning and depth to the engineering education offered by the college.

NASA/Florida—State Technology Applications Center (STAC)
The State University System, the National Aeronautics & Space Administration and certain cooperating colleges of engineering of Florida, including the University of South Florida, have jointly developed the State Technology Applications Center.

STAC offers rapid access to more than 10 million modern published articles related to almost every field of human endeavor and thus provides information to help solve vexing problems at significant savings in man hours and money. This service is a bright new resource for Florida business and industry. Just a short decade ago this concept would not have been feasible. Through perserverance the computer minded community developed a remarkable system of "key wording" information which is stored in the memories of computers. Using these "key words," the computer locates pertinent and required publications, at times far removed from the subject matter in question—titles may be passed over in the usual library investigation. STAC charges a minimal fee for its search since its operation is partially supported through NASA and State funds. The STAC Office at the College of Engineering, University of South Florida, Tampa, FL 33620, serves the south central area of Florida.

Air Force - R.O.T.C.
For Engineering Students
The Engineering curriculum, coupled with the involvement in the Air Force R.O.T.C. program, requires a minimum of five (5) years to complete degree requirements. Air Force R.O.T.C. cadets must take 16 additional hours in aerospace studies, along with an Air Force sponsored summer training camp between their sophomore and junior years in College.
The College of Fine Arts serves the three-fold purpose of providing programs of study, theatres of practice, and programs of events for the University family, the surrounding community, and the citizens of the State of Florida. In recognition of its academic and artistic achievements, the College of Fine Arts has been given Program of Emphasis status by the Board of Regents of the State University System.

Its prime objectives are: (1) to provide a broad but thorough education dedicated to the development of professional excellence in those who are highly talented in the fine arts, (2) to foster this feeling and commitment to aesthetic excellence in those preparing for teaching, and (3) to provide curricular studies and extracurricular activities designed to enrich the life of the general University student and contribute to the overall human environment of the University and Tampa Bay communities.

The College offers degree programs in the departments of Art, Dance, Music, and Theatre, and conducts a program of cultural events. Programs in art education and music education are offered jointly by the College of Fine Arts and College of Education.

The College of Fine Arts recognizes the importance of maintaining an arts-filled environment as an integral part of the total learning experience it offers to the students within the college and to the community at large. It is critically aware that a truly comprehensive university performing arts program must include performances and related activities by internationally recognized artists and ensembles.

Through the Artist Series, The Chamber Music Series, the Performing Arts Residency program, and the Film Art Series, the college continually strives to enrich its academic program and the cultural environment by bringing to the campus and into the community artists of the highest stature in dance, music, and theatre from around the world. The list of prestigious artists which have been presented over the years by the College of Fine Arts is impressive and a sampling includes John Cage, the Guarneri String Quartet, Lazar Berman, the New York Pro-Musica, Alvin Ailey, Martha Graham, Marcel Marceau, and the Polish Mime Ballet Theatre.

(Fine Arts Management and Events is the designation given to the arts management program of the college. With a faculty whose professional and academic credentials are of the highest quality, Fine Arts Management and Events provides the expertise needed to develop and administer these programs. The unit also functions as the technical service wing of the College's departmental performing arts programs and serves as a teaching resource for the academic programs in the college. Courses in arts management and various courses in the design/technology track are taught by members of the Fine Arts Management and Events faculty.)

The impact of the Fine Arts Management and Events Program on the cultural life of the University and the community is immeasurable, affording the fine arts student numerous opportunities to become aware of the unlimited options he or she might wish to pursue, and providing for the whole community cultural enrichment opportunities that otherwise would not be available.

**BACCALAUREATE LEVEL DEGREE PROGRAMS**

**Programs Leading to the Baccalaureate Degree**

The College of Fine Arts has programs leading to the Bachelor of Arts degree in the fields of Art, Dance, Music, Music Education, and Theatre, and a Bachelor of Fine Arts degree in Theatre.

**Advising in the College**

The College of Fine Arts operates a central advising office located in the Fine Arts Building. It maintains the records of all major students in the College (art, dance, music, theatre) and provides on-going academic advising, referral services and assistance to all present and potential students. Academic advisers are provided for each of the departments in the College. All music education majors are advised through the music education coordinator's office. For information and appointments call or write the Director of Advising, College of Fine Arts or College of Education.

Degree-seeking graduate students accepted into the M.F.A. program in art, the M.A. program in music education, or the M.M. program in music will be counseled on program requirements and in their selection of courses by the appropriate graduate adviser.

Any student in the University, regardless of major, may enroll in courses offered by the college of Fine Arts when prerequisites are met and space is available. Where applicable, these courses may be used to satisfy elective or General Distribution Requirements.

In all cases, the responsibility for meeting all graduation requirements rests entirely upon the student.

**Graduation Requirements**

The College of Fine Arts currently offers two undergraduate degrees, the Bachelor of Arts (B.A.), attainable in the departments of Art, dance, Music and Theatre, and the Bachelor of Fine Arts (B.F.A.) in Theatre. The University requirements are presented on page of this Catalog, but are briefly summarized here along with the college and departmental requirements:

1. 120 credits for the B.A. and 150 credits for the B.F.A. with at least a "C" average (2.0) in work done at the University of South Florida.
and in the major. At least 40 credits must be in courses numbered 3000 or above. Since 15 hours is considered a normal, full-time load, students are reminded that programs requiring more than 120 credit hours may require additional semesters for completion of the program.

2. General Distribution Requirements may be satisfied by (1) completing the University's General Distribution Requirements as explained on page 35 of this catalog. (2) completing the A.A. degree from a Florida Junior or Community College, or (3) completing the general education requirements from another Florida state university. General education courses transferred from other accredited institutions will be evaluated based on USF General Distribution equivalencies. The A.A. degree is in no way a requirement for acceptance into the College of Fine Arts (or into any one of its upper level degree programs), or a requirement for graduation from the University.

3. Students admitted to the College of Fine Arts with transfer credits dating ten or more years prior to admission (or readmission) will have those credits reviewed by the College and Department and may be required to take specified competency tests in their major area.

4. Special Fine Arts College Requirement: All majors in the College of Fine Arts must take at least 6 credit hours in one or more of the other departments of the College.

5. A maximum number of ROTC credits totaling no more than the maximum allowed in the Free Elective Area for each major may be counted towards the B.A. or B.F.A. degree.

6. With departmental approval, a maximum of 4 credit hours of elective Physical Education credits taken at USF may be counted as general elective credit toward the B.A. or B.F.A. degree in the College of Fine Arts.

7. Satisfactorily complete the College Level Academic Skills Test and the writing and computation core requirement of 6A-10.30.

8. Departmental Requirements:

Art Requirements: Completion of a minimum of 46 hours in the major, 19 credit hours of Free Electives (of which 16 credit hours in art may apply), and 9 credit hours of non-major credits which may be distributed at the discretion of the Art Department.

Dance Requirements: Completion of a minimum of 42 credit hours in the major, 23 credit hours of Free Electives (of which 19 hours in dance may apply), and 9 hours of non-major credits which may be distributed at the discretion of the Dance Department.

Music Requirements: Completion of a minimum of 64 hours in the major and 10 hours of non-major electives of which 5 hours may be distributed at the discretion of the Music Department.

Music Education Requirements: For Instrumental Specialization, the completion of a minimum of 22 credit hours of Music Education courses and 61 credit hours of Music courses. For Vocal Specialization, the completion of a minimum of 21 credit hours of Music Education courses and 61 credit hours of Music courses.

Theatre Requirements: For the B.A., completion of the University's General Distribution Area II, departmental or college recommendations. The review for waiver is by faculty committee. Specific questions concerning program requirements for the B.A. and B.F.A. degrees in the College or other related problems, should be directed to the Coordinator of Advising, College of Fine Arts, University of South Florida, Tampa, Florida 33620.

The responsibility for seeing that all graduation requirements are met rests with the student.

Courses for General Distribution Requirements:

Courses in the College of Fine Arts in the departments of Art, Dance, Music and Theatre fall within Area II of the University's General Distribution Requirements. (See page 35 of the University Catalog for a complete description of General Distribution Requirements and special policies for AA degree holders and other transfer students with "General Education Requirements" met.) However, a major in any one of the four departments in the College of Fine Arts may utilize only those courses in the other three departments of the College for Area II General Distribution Requirements:

College Policy for Academic Progress

The following criteria will serve as the basis for disenrollment from a major in the College of Fine Arts.

1. Grade point average below 2.0 in the major
2. Recommendation by major applied (studio) art, dance, music or theatre faculty with approval of respective department chairperson, or art education coordinator.
3. The department may recommend probationary status (rather than disenrollment) for one semester when academic progress is not maintained.

Contracts and Permission Procedures

Directed Studies Contracts:

All Directed Studies and other variable credit courses in the College of Fine Arts require contracts between students and instructors describing the work to be undertaken by the student and specifying the credit hours. These contracts are to be completed in quadruplicate and appropriately signed. It is the student's responsibility to obtain the necessary signatures and make the required distribution of all copies. Important! The student must have his/her signed copy of a contract at the time of registration.

S/U Grade Contracts:

The College of Fine Arts requires that any S/U grading agreement entered into between student and instructor be formalized by a contract in quadruplicate signed by the student and the instructor and distributed according to instructions.

"I" Grade Contracts:

Undergraduates

Incompletes must be contracted for by mutual agreement between student and instructor, with the contract describing specifically the amount and nature of the work to be completed for the removal of the incomplete grade. This contract additionally clearly specifies the date that the work will be due within limits for grading. Both the student and the instructor must sign this contract and the four copies must be distributed according to instructions. A student must not register for a course again to remove an "I" grade.

Grads

Incompletes ("I") grades for graduate students must be completed and the grade changed prior to graduation. An "I" grade contract must be completed for each course where an incomplete grade is requested. Consideration for exception to this rule may be made by processing a Request for College Waiver of Academic Policy form (available in the Advising Office). Please see page 32 for more details concerning the University's "I" grade policy.

Permission Procedures:

Admission into some courses is possible only by consent of instructor (CI), consent of chairperson (CC), consent of adviser, or by audition or portfolio review. When such special permission is required, it will be the student's responsibility to obtain any required permission prior to registration.

S/U Grading in the College

1. Non-majors enrolled in courses in the College of Fine Arts may undertake such courses on a S/U basis with instructor approval. See Contracts and Permission Procedures for information concerning S/U Grade Contracts.

2. Credits earned by a non-major student with an "S" grade will not count toward the student's minimum major course graduation requirement.
should that student ultimately decide to become a major student in one of the four departments in the College. Instead, such credits earned with an “S” grade will be assigned to the student's Free Elective category (with the exception of music which will become non-countable).

3. Although Fine Arts majors may take course work in their major as Free Electives, they are not entitled to the S/U grading option for these courses taken in their major subject area, even when specifically used or intended to be used as Free Electives.

4. In the college of Fine Arts, the only S/U graded courses available to a major student in his major subject area are those curriculum allowable exclusive designated S/U (that is, S/U only).

5. With the exception of such courses as may be specifically required under the College’s “Special Requirements” regulation, a maximum of 9 credit hours of S/U credits in non-major courses may apply towards a degree in the College of Fine Arts.

Please see page 31, for more information concerning the University’s S/U Grading policy.

Dean’s List Honors

See Academic Policies and Procedures, Programs and Services, page 29.

Interdisciplinary Study

In spite of the fact that an undergraduate interdisciplinary degree program is not formally offered in the College of Fine Arts, it is possible for a student to pursue such a program of study in the College by utilizing free electives allowed in the major program. A student may also choose a double undergraduate major in two departments within the College of Fine Arts as a means of interdisciplinary study. See the major adviser in the programs of particular interest.

Minors Program

The College of Fine Arts offers minor programs in Art, Dance, Music, Theatre. Majors in the College of Fine Arts may pursue a minor in any certified minors program at USF except within the same department as the major. The requirements for these programs are located under the departmental academic program descriptions. For University Minor Policy, consult page 38 of this Catalog.

Master’s Level Degree Programs

The College of Fine Arts offers three master's level degree programs, the Master of Fine Arts (M.F.A.) in the art department, the Master of Music (M.M.) in the music department and the Master of Arts in Music Education (M.A.) in collaboration with the College of Education. The requirements for these programs are located under the departmental academic program descriptions. The general University admissions requirements for graduate degree-seeking status and the regulations of the University governing graduate study are described beginning on page of this Catalog. The general University application procedures are explained on page . When all the information required for general acceptability into the University is received in the Graduate Admissions Office, the information gathered by the office will be forwarded to the appropriate department in the College of Fine Arts where final processing occurs. However, it is important that the applicant simultaneously seeks to satisfy the departmental admission requirements along with the requirements of the Office of Graduate Admissions in order to meet all deadlines.

PROGRAMS AND CURRICULA

ART (ART)

Departmental Requirements for the B.A. Degree

The art curriculum is designed to develop the student's consciousness of aesthetic and ideological aspects of art and its relationship to life and to assist students in the realization of personal ideas and imagery. Most B.A. recipients interested in college teaching, museum or gallery work, fine or commercial studio work pursue the extended discipline and experience offered at the graduate level.

Although the Art program allows many possible courses of study, most art major students will select one area of emphasis chosen from the course offerings listed.

The major concentrations, or areas of emphasis, available to undergraduate (B.A. seeking) art students are: Drawing, Painting, Sculpture, Ceramics, Graphics (Lithography and/or Intaglio), Photography, Cinematography, Art History and Theory. Art majors must receive a grade of “C” or better in all art courses.

Transfer studio credit will be accepted on the basis of portfolio and transcript evaluation.

For additional requirements see page 122 for Graduation Requirements, College of Fine Arts.

The requirements for the bachelor's degree in Art Education are listed under the College of Education.

Art Studio Concentration (46 semester hours minimum)

1. Visual Concepts I, II and Introduction to Art, 12 credit hours.
2. Minimum of 12 credit hours of 3000 level studio courses (exclusive of Technique Seminars.)
3. Minimum of 8 credit hours of 4000 and/or 5000 level studio courses exclusive of Technique Seminars with an emphasis in one area.
4. Minimum of 12 credit hours in art history courses from the following:
   Twentieth Century art is required.
   ARH 4100 ARH .4350 ARH 4530
   ARH 4170 ARH 4430 ARH 4796
   ARH 4200 ARH 4450 ARH 4937

5. Art Senior Seminar, 2 credit hours.
6. Maximum of 16 semester hours of art electives.

Art History Concentration (46 semester hours minimum)

1. Visual Concepts I, II and Introduction to Art, 12 credit hours.
2. Minimum of 16 credit hours of 4000 level art history courses including Twentieth Century art history.
3. Seminar in the History of Art History, 4 credit hours.
4. A minimum of 12 credit hours in Directed Readings (1 to 6 semester hours each) and/or Critical Studies in Art History (4 semester hours each).
5. Art Senior Seminar, 2 credit hours.
6. A proficiency in French or German. In lieu of some considerable direct living experience with another language, it is suggested that a minimum of two years or equivalent of college-level study of a language be undertaken.
7. A maximum of 16 semester hours of art electives.

For more specific information concerning this requirement, the student should consult with the art adviser or the faculty of the art history area of the art department.

Requirements for a minor in Art (20 semester hours minimum)

I. Studio Concentration:
   ART 2202C (4) ART 2203C (4) ARH 3000 (4)
   Plus: Two 4 semester hour classes from 3000 studio level (8)
II. Art History concentration:
   ART 2202C (4) ART 2203C (4) ARH 3000 (4)
   Plus: Two 4 semester hours classes from any of the following:
   ARH 4100 (4) ARH 4301 (4) ARH 4450 (Required) (4)
   ARH 4170 (4) ARH 4350 (4) ARH 4530 (4)
   ARH 4200 (4) ARH 4430 (4)

Visiting Artists and Artist-In-Residence

The art department is widely known for the consistent level of excellence of its programs. Aside from the contributions of its permanent staff, and to insure the continuing expansion of learning opportunities available to students, the art department has brought to the campus internationally
known artists and lecturers such as Scott Bartlett, Larry Bell, FreiD Drubas, Allen Jones, Nicholas Krushenick, Daniel Lang, Paul Sarkissian, Lucas Smaras, Robert Irwin, James Rosenquist, Robert Rauschenberg, Philip Pearlstein, Edward Fry, Alice Aycock, Alfred Leslie, Linda Benglis, Ron Gorchov, Patterson Sims.

**Master of Fine Arts Degree (Art)**

The major concentrations, or areas of emphasis available to graduate (M.F.A.) art students are: Drawing, Painting, Sculpture, Ceramics, Graphics (lithography and/or intaglio), Photography, Cinematography.

**Procedure for Applying**

The application for admission to graduate study should be sent to University Admissions prior to deadlines published in the academic calendar on page 4-5. However, the application and all support materials (portfolio, etc.) should be submitted early enough so that they will reach the art department by the following dates: for Semester I admissions by March 1; for Semester II admissions by October 1.

At least one week should be allowed for internal processing of the application providing all transcripts have been received and the applicant's grade point average (GPA) for the final 60 semester or 90 quarter credit hours of undergraduate work is 3.0 or above. If the GPA is below 3.0 the GRE score must be available which may take up to six weeks from the date the exam is taken.

The applicant should submit a portfolio of art work directly to the Graduate Art Adviser in the College of Fine Arts for faculty review. The portfolio should consist of 35 mm slides, for convenience in shipping, handling, and presentation. Applicants in drawing and printmaking, however, should send original works and applicants in photography should send original prints. Cinematography applicants should send duplicate prints.

The portfolio should provide evidence of maximum strength in the area of the applicant's primary interest, although work submitted may represent more than one discipline. Return postage in stamps in the amount necessary for the return of all materials should accompany the portfolio. (Please do not send cash, checks or money orders.)

Applicants to the Master of Fine Arts Degree program are also required to submit (in addition to the portfolio), three letters of recommendation and a letter of intent.

For information concerning University graduate studies, admissions and graduation policies see page 51. It is the applicant's responsibility to see that all required materials such as transcripts, GRE scores, portfolio and letters of recommendation are received in time to be processed by the art department deadlines.

**Requirements for the M.F.A. Degree**

A student may be accepted into the M.F.A. program either provisionally or fully. Provisional enrollment is normally provided for one or two consecutive terms. When accepted fully as degree-seeking, the student will be given a calendar year in which to achieve "degree-candidacy." These steps are achieved by submission of work for faculty reviews held twice a year. All degree-seeking students are provided with two opportunities within the calendar year to achieve candidacy. If a degree-seeking student does not achieve candidacy on the second attempt, the student will then be terminated from the program.

Upon acceptance to candidacy, the student will select a committee of three faculty members, two of which must be studio faculty of the student's primary discipline.

The M.F.A. degree requires a minimum of 60 semester hours. The bulk of a student's program is discretionary, and is planned with the advice of the graduate art adviser in its initial stages, and later with the advice of the student's graduate committee.

Specific program requirements include work in theory (ART 6936 Graduate Seminar: 2 hours credit, must be taken twice); participation in instruction (ART 6937 Graduate Instruction Methods: Variable credit to 4 hours); presentation of work (thesis exhibition for which credit is normally given); and thesis documentation (usually earned under ART 6971, Masters Thesis but in certain circumstances under ART 6911, Directed Research); credit for documentation is variable; and 12 hours in art history.

Students are also required to participate in a thesis orals session in conjunction with the thesis exhibition. This is a forum for questions from faculty representatives and is open to other graduate students.

Graduate students are normally assigned studio space, when available, in the department and are expected to remain in residency during their enrollment. Exceptions must have the approval of the student's graduate committee and the graduate art adviser. Approval from both of these sources is also necessary for the acceptance of any Special Student status courses (up to 8 hours) taken prior to admission and for any transfer credit from another institution (limited to 9 hours). The graduate committee must additionally approve the written thesis, the thesis exhibition and the conduct of the orals in satisfaction of degree requirements.

The requirements for the M.A. degree in Art Education are listed under the College of Education.

**DANCE (DAN)**

The dance curriculum is designed for students interested in dance as an art form. Their objectives may be to continue their education in graduate school, to teach in a college or a private school, or pursue a career as a performer and/or choreographer.

Major concerts are presented each semester as well as workshop performances. Major dance companies are brought to the campus giving students the opportunity of studying with visiting artists.

**Requirements for the B.A. Degree (42 semester hours minimum)**

Suggested curriculum pattern:

<table>
<thead>
<tr>
<th>First Year</th>
<th>1st semester</th>
<th>2nd semester</th>
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<td>DAA 2100</td>
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<td>Elective</td>
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<tr>
<td>DAN 3610</td>
<td>2 credit hours</td>
<td>Elective</td>
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<tr>
<td>DAN 3611</td>
<td>2 credit hours</td>
<td>(Fine Arts requirement)</td>
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<tr>
<td>TPA 2223</td>
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Second year - all students (13 credit hours plus electives)

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<th>1st semester</th>
<th>2nd semester</th>
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<td>3 credit hours</td>
</tr>
</tbody>
</table>

Third Year - Modern Concentration (14 credit hours)

<table>
<thead>
<tr>
<th>1st semester</th>
<th>2nd semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAA 3161</td>
<td>6 credit hours</td>
</tr>
<tr>
<td>DAA 3220</td>
<td>3 credit hours</td>
</tr>
<tr>
<td>DAA 4702</td>
<td>2 credit hours</td>
</tr>
<tr>
<td>DAN 3590</td>
<td>2 credit hours</td>
</tr>
<tr>
<td>DAN 3710</td>
<td>1 credit hour</td>
</tr>
</tbody>
</table>

Fourth Year - Modern Concentration (13 credit hours)

<table>
<thead>
<tr>
<th>1st semester</th>
<th>2nd semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAA 4162</td>
<td>8 credit hours</td>
</tr>
<tr>
<td>DAA 4703</td>
<td>2 credit hours</td>
</tr>
<tr>
<td>DAN 3710</td>
<td>1 credit hour</td>
</tr>
<tr>
<td>DAN 4170</td>
<td>2 credit hours</td>
</tr>
</tbody>
</table>

**Department Policy For Academic Progress**

A maximum of 19 credit hours of Dance electives may apply toward the dance degree. For course descriptions, see page 240.

TPA 2223 Theatre Crafts: Lighting (3) is required of all dance majors and may apply toward Area II of the General Distribution Requirements, or non-major electives, or the 6 hour Special College Requirement.

Dance majors must enroll for at least a minimum of 2 credits (1 per
Transfer Student
and/or a waiver of one or two credits for the remaining technique credits (20 semester hours minimum) in DAN 3590 Practicum in Dance Production. By doing technical preparation and working backstage in a minimum of two major concerts, the student will have a better grasp of production problems and their solutions. The major student is expected to earn 2 credits in DAN 3710 Repertory by performing in at least two concerts or workshops in their junior or senior year.

Junior dance majors are required to do a dance project and senior dance majors are required to choreograph a group work and perform a solo in a dance program.

Entrance to all technique courses is by jury examination. A student must audition each semester to stay at his/her present level or to advance to a higher level. Until the student is accepted into Modern Dance III or Ballet III he/she will be considered as a probationary dance major. DAA 2160 or DAA 2201 may be repeated only once for credit towards degree requirements.

Prospective students must contact the dance department to arrange for an audition prior to registration.

Critiques
1. All students will be evaluated periodically at faculty sessions as well as critiqued per semester. Majors will be advised accordingly.
2. If the faculty feels that a student is deficient in some area which necessitates a probationary action, the student in question will be advised and asked to sign a probation form. This form is kept on file with the student's advisor.
3. Failure to make satisfactory progress within the following semester shall constitute grounds for Departmental recommendation to drop and discontinue the major.

Minimum Grade for Dance Courses
A student must receive a "C" grade or better in required major courses. Should a student fail to do so, the courses in which the student received a "D" or "F" must be repeated and a "C" grade or better earned.

Additional Standards
In addition to meeting the specific requirements and standards discussed above, the student and advisor will periodically evaluate the student's general progress. A less-than-satisfactory rating in one or more of the following areas could place the student on probation. A student on probation is given a specific amount of time to achieve a satisfactory rating before being dropped from the major program:
1. Adequate technical skill and adaptability.
2. Evidence of creative potential.
3. "B" average in major studio classes.
4. Good health which includes adequate control of body weight.

Class probation and department probation require review and final determination at the end of the subsequent semester. Students will be notified of the results of final faculty review, i.e., reinstatement in good standing or recommendation to drop major.

A dance major is expected to keep his/her weight at a level that is aesthetically acceptable to the dance faculty for classroom training and all performances.

For other non-major requirements see page of Fine Arts College requirements and page for the University's General Distribution and graduation requirements.

Requirements for a minor in Dance
(20 semester hour minimum)
I. Minimum of 10 semester hours upper level courses (3000 and 4000 level courses).
II. Admission to all studio classes is by audition only (as with major students) and the student must be ranked by level before being admitted. Studio courses may be repeated for credit as stipulated in the Catalog.
III. Prospective students must contact the Dance department to arrange for an audition prior to registration. DAA 2160 and DAA 2200 may be repeated only once for credit toward the minor.
IV. The student must audition each semester to stay at his/her present level or to advance to a higher level for all technique courses.

Transfer Student Requirements
Transfer students must have a minimum of 8 credits in major technique on campus. The Dance faculty will consider a transfer of credits and/or a waiver of one or two credits for the remaining technique credits required upon the written request of the student. The written request must be accompanied by a letter of recommendation from the student's former instructor. Such a request and letter of recommendation does not obligate the faculty to accept the credits the student wishes to transfer. No technique credits will be considered for transfer unless the university or college from which the student is transferring has a recognized major in dance.

Visiting Artists And Artists-in Residence
By supplementing its excellent on-going regular staff-instructed dance curriculum with other professional resources made available through the Visiting Artist and Artist-in-Residence programs, the Dance department provides for dance students an overall dynamic program for practice, study and learning.

MUSIC (MUS)
The B.A. Degree (Performance, Piano Pedagogy and Composition):

The music curriculum is designed for those students gifted in the performance and/or composition of music. Candidates for a major in music are required to pass an entrance examination (audition) in their respective performance area. Composition candidates are required to submit appropriate scores and/or tapes of their compositions for faculty appraisal. Before freshmen students may enter the theory sequence, a grade of "C" or better must be made on the theory entrance test. If this grade is not achieved on either section (written and aural) of the test, the student must enroll in a music fundamentals for majors course, which will not apply towards the major requirements. Transfer students are required to take a theory placement test and required to enter at the appropriate level. Students may obtain dates and times for these examinations from the music department office. Completion of those examinations is required before registration in music courses can be permitted.

Academic programs offered include:
Bachelor of Arts degree with concentration in Performance (voice, piano, organ, harp, guitar and orchestral instruments), Composition, and Piano Pedagogy.

General Requirements:
All students seeking a degree in music are required to (1) complete successfully the piano proficiency and music theory-history-literature requirements as defined by the music faculty. A grade of "C" or better must be made on music theory departmental exams to advance through the theory course sequence; (2) present a partial public recital during the junior year - except composition majors; (3) present a full public recital during the senior year; (4) presents a record of satisfactory recital attendance during each of the semesters of study at the University (the specific requirements for satisfactory attendance are set by the music faculty). Those requirements are in addition to the actual course requirements listed below.

Core Requirements for all Performance, Pedagogy and Composition Concentrations (36-40 semester hours minimum):
Music Theory (20)
MUT 1111 (3) MUT 1242 (1) MUT 2246 (1)
MUT 1112 (3) MUT 2116 (3) MUT 2247 (1)
MUT 1241 (1) MUT 2117 (3) MUT 4431 (2)
One of MUT 3000 or 4000 course offerings (2)
Music Literature (4)
MUL 2111 (2) MUL 2112 (2)
Music History (6)
MUH 3211 (3) MUH 3211 (3)
Senior Seminar (2)
MUS 4935 (2)
Major Ensemble - Performance and Pedagogy (8), Composition (4)
All undergraduate students enrolled in applied music for 3 credit hours are required to be enrolled concurrently in a major ensemble appropriate to their performing medium.

Additional Requirements for Specific Concentrations:
Performance Concentration
(64 semester hours minimum):
A total of 24 credit hours of applied music is required with a minimum of 6 hours to be completed at the senior level.
Promotion to the next higher level in applied music is made upon the
recommendation of the faculty in the student's respective performance concentration based upon a jury examination conducted by that concentration's faculty.

Piano Pedagogy Concentration (68 semester hours minimum):

The following requirements for the piano pedagogy concentration are in addition to the above performance concentration requirements:

Music Studio Pedagogy (4)

MVK 4640 (2)  MVK 4641 (2)

Junior and Senior recital requirements may be fulfilled in one of the following ways: (1) lecture/recital, (2) ensemble performance, (3) full recital with music, or (4) full recital without music.

Composition Concentration (72 semester hours minimum)

All students seeking a degree in music with a composition concentration are required to fulfill the senior composition requirements (with the approval of the entire faculty) in one of the following ways; (a) a complete public performance of works by the student composer, (b) the public performance of several compositions in various concerts throughout the composer's senior year, (c) the formal presentation to the composition faculty of an extensive portfolio of compositions plus the public performance of at least one of these works during the senior year, or (d) in other ways so designated by the composition faculty.

Major Ensemble (4)

All undergraduate students enrolled in applied music for 3 credit hours are required to be enrolled concurrently in a major ensemble appropriate to their performing medium.

Applied Music (12)

A minimum of 12 credit hours of applied music is required with a minimum of 6 credit hours at the 2000 level.

Composition Courses (24)

Undergraduates concentrating in composition must complete a minimum of 24 credit hours from the following sequence of courses including MUC 3402, and at least one semester of MUC 4204, satisfying all necessary prerequisites for all courses:

MUC 2202 (3,3)  MUC 3601,3602 (3,3)
MUC 2301 (2)  MUC 4204 (3)
MUC 3203 (3)  MUC 4405,4406 (3,3)
MUC 3401, 3402 (3,3)  MUC 4501 (2)
MUC 3441, 3442 (3)  MUC 4311, 4312 (2,2)

For other degree requirements for all the above concentrations, see page 122 of the Fine Arts College requirements and page 35 for the University's General Distribution and graduation requirements.

- MUSIC EDUCATION

Requirements for the B.A. Degree (MUE):

All students seeking a degree in music education are required to pass an audition in their respective performance area. Before freshman students may enter the theory sequence, a grade of "C" or better must be made on the theory entrance test. If this grade is not achieved, the student must enroll in a music fundamentals course. This course will not apply toward the major requirements. If either portion (written or oral) of the test is failed, the student must take the fundamentals course. All transfer students are required to take a theory placement test and required to enter at the appropriate level. Students must obtain the dates for these examinations from the music office. Completion of the examinations is required before registration in music courses can be permitted.

Special requirements for all music education majors; successful completion of the piano proficiency requirement as defined by the music and music education faculties; participation in a major performing ensemble each semester the student is enrolled in applied music; and the presentation of a one-half hour recital in the major performing medium during the senior year.

Students are encouraged to attend on-campus musical events (major ensemble concerts, student and faculty recitals, and Artist Series concerts).

For other degree requirements see page 122 of the Fine Arts College requirements and page 35 for the University's General Distribution and graduation requirements.

A. Instrumental Specialization (83 cr. hrs.)

Music Education courses (22 cr. hrs.)

MUE 2420 (1)  †MUE 3414 (1)  *MUE 4314 (3)
MUE 3411 (1)  *MUE 4050 (3)  *MUE 4332 (3)
†MUE 3413 (1)  *MUE 4130 (3)  **MUE 4480 (1)

† must be taken up to two hours
* one credit hour of pre-interning enrollment required with each course.
** elective for band emphasis

Music courses (min. 61 cr. hrs.)

MUT 1111 (3)  MUT 2116 (3)  MUL 2111 (2)
MUT 1112 (3)  MUT 2117 (3)  MUL 2112 (2)
MUT 1241 (1)  MUT 2246 (1)  MUH 3211 (3)
MUT 1242 (1)  MUT 2247 (1)  MUH 3212 (3)
MUG 3101 (2)

Applied Music (21 cr. hrs., min. 3 hrs. senior level)

Applied Music Secondary (Techniques - 5 cr. hrs.)

(One each: woodwind, brass, string, percussion, voice)

Major performing ensembles

(Requirements of one per semester of applied music - 7 cr. hrs.)

Graduating recital

Piano proficiency requirement

Art, Dance Theatre (min. 4 cr. hrs.)

(to be selected from one or more of the other departments of the College of Fine Arts)

B. Vocal Specialization (81 cr. hrs.)

Music Education courses (21 cr. hrs.)

MUE 2420 (1)  MUE 3414 (1)  MUE 4314 (3)
†MUE 3411 (1)  *MUE 4050 (3)  *MUE 4331 (3)
†MUE 3413 (1)  *MUE 4130 (3)

† Must be taken up to two hours.
* one credit hour of pre-interning enrollment required with each course.
** Elective for band emphasis

Music courses (min. 61 cr. hrs.)

MUT 1111 (3)  MUT 2116 (3)  MUL 2111 (2)
MUT 1112 (3)  MUT 2117 (3)  MUL 2112 (2)
MUT 1241 (1)  MUT 2246 (1)  MUH 3211 (3)
MUT 1242 (1)  MUT 2247 (1)  MUH 3212 (3)
MUG 3101 (2)

Applied Music (21 cr. hrs. minimum 3 cr. hrs. senior level)

Applied Music Secondary (Techniques 4 cr. hrs.)

(One each: woodwind, brass, string, percussion)

Ensembles

(Requirements of one per semester of applied music - 7 cr. hrs.)

Piano proficiency requirement

Graduating recital

Art, Dance Theatre, (min. 4 cr. hrs.)

(to be selected from one or more of the other departments of the College of Fine Arts)

Requirements for a minor in Music (19-22 semester hour minimum)

Students seeking a minor in music may choose from three concentrations: (1) History-Theory-Literature, (2) Applied Medium and (3) Composition. Each of the concentrations will include the same core curriculum consisting of 11-12 hours.

I. Core Curriculum:

Music Theory

Introduction to Music Literature

or

Music History

(8)
(4)
(3)

II. Optional Concentrations:

A. History-Theory-Literature

Music History and/or Theory and/or Literature

9-10 hours

Music Ensemble

(7-8)
(2)
B. Applied Medium
Performance Studio courses which may include up to 2 semester hours of class-studio (6-8)
Music Ensembles (2)
Faculty jury recommendations for sophomore level studio study (minimum)
C. Composition
Introduction to Electronic Music (2)
Composition Studio courses which may include one course of orchestration (6)
Theorists (1)
III. Admission to all studio courses is by audition with major students, and the student must be ranked by level. Class-studio courses may serve as preparation for auditions. Registration in all music courses is by permission of the instructor. Studio courses may be repeated for credit as stipulated in the Catalog.

Master of Music Degree

The major concentrations available to graduate (M.M.) music students are:
- performance
- composition
- piano pedagogy
- theory
- choral conducting

Procedure for Applying

The applicant seeking acceptance into the Master of Music degree program must meet the University's general admissions requirements and make formal application for general University acceptability with the Graduate Admissions Office. Concurrently, the applicant must arrange to fulfill the specific admission requirements in the Music department (of the College of Fine Arts). Full acceptance cannot be given until the applicant satisfies: (1) performance audition, (2) special requirements in music theory (see dept. handbook). Dates and times for auditions and examinations may be obtained by telephoning or writing the Music Department, College of Fine Arts. Persons to contact directly are the Chairperson of the music department and the Coordinator of Graduate Music studies.

Requirements for the M.M. Degree (30 semester hour minimum)

General requirements for graduate work are given on page 51. In addition, the applicant for the Master of Music degree program will need to satisfy the following requirements in music before initial registration: (1) performance audition, and (2) placement examinations in music theory.

All candidates for the degree must take the following course work:
- *Techniques of Research in Music* (3)
- *Critical Analysis of Music Repertory* (2)
- *20th Century Music Literature* (3)

*Should be taken during the first semester of enrollment

Degree Requirements will vary according to the program chosen as well as the student’s needs and interests. Recommended programs may be obtained from the department chairperson. Each program must be approved by the Coordinator of Graduate Studies, conformance with the guidelines established by the Graduate Music Committee. A minimum of 30 semester hours is required.

No secondary applied music course may be used to satisfy the general applied requirement. Students must enroll for the major applied offering (4 semester hours).

The responsibility for seeing that all graduation requirements are met rests with the student.

Requirements for the M.A. Degree (MUE):

Plans in both instrumental and vocal music are offered. A placement examination is required of all new registrants in music theory. Each candidate must meet the undergraduate level of piano proficiency before the student in which he/she expects to graduate. Participation in ensembles is required for at least two semesters. Three plans are available to the candidate: 35 hours course work, 32 hours plus recital, or 30 hours plus thesis.

Seven credits in education to include EDF 6215 and EDF 6431; nine credits in music education including MUE 6080 and MUE 6189; including six credits in music theory-history-literature and four credits in applied and MUS 6793.

The Faculty:

USF’s superior music faculty has been carefully chosen for its training, performing ability, and ability to teach. It is in every sense a team. This achievement has been demonstrated by such fine musical ensembles as the Faculty String Quartet, the Faculty Brass Quintet, the Ars Nova (faculty) Wind Quintet and the Faculty Chamber Players.

SYCOM

The SYStems COMplex for the Studio and Performing Arts exists to provide essential instructional services and state-of-art reproducing, mixing, editing, and electronic sound generating and processing equipment (digital and analog) for development and implementation of explorative research and creative activity by artists, scientists, and students (generally enrolled in related classes) at USF.

Basic recording facilities in Studio A include a custom designed 12 channel quad. mixing console, constructed around an OPAMPS frame (with patchbay, remotes and monitor controls), an MCI eight-track recorder (1, format: 7/8, 15, 30 ips) with DBX 208, an Ampex ATR 102 two-track recorder with Dolby A, a TEAC 40-4 four-track recorder with DBX, a MIC MIX stereo reverb and four White 1/3 octave equalizers. Four JBL 4315 B studio monitors are powered by two Yamaha amplifiers. Eu Systems provides a modular synthesizer with a real time 16 voice microprocessor controlled, keyboard/sequencer (6000 notes of storage, cassette “load and store” of software, a Prophet-5 and Emulator complete sound generating capabilities). Computer facilities include a standard Z800 cpu (system upgradable to Z8000 with 64 K of RAM, and IBM compatible IBM PC data tape drive (7 or 9 track; 800 or 1600 BPI), a 29 megabyte Shugart disk, two 500 K double density floppy diskettes, four channels of 12 bit d to a for synthesizer control (8 for pitch; 8 for amplitude; 16 separate triggers), one channel of analog-to-digital conversion and two Hazeltine 1500 terminals. A Megasystems hybrid microprocessor/sequencer with 2000 notes of storage and an array of specialized software entered on a standard ASCII terminal is also available. Peripherals include a Technics SL 1600 MK2 turntable system, an Akai GX-M50 cassette deck, a frequency counter and a digital clock.

Written proposals for individuals or group projects to be sponsored or subsidized by SYCOM and/or extramural granting agencies should be submitted for consideration to the director of SYCOM. The subsequent results of project activities will be exhibited in the form of public lectures, performances, reports, publications, or large theatrical events and special workshops, such as Sound Gallery, the Event/Complex Series, Art-Tech Workshop, and the new music/media festival, INTERMUSE.

Unique Learning Opportunities:

The music department at the University of South Florida offers the student the opportunity to study with a distinguished faculty, work with the newest in creative equipment, and to be in the company of other superior music students for an extensive, exciting and exacting period of study. In addition to the already established programs in the choral, orchestral and wind ensemble areas, opportunities are now available in jazz with performances with the jazz ensemble and chamber jazz ensembles, a full range of jazz courses and professional playing opportunities in the area.

Visiting Artists and Artists-In-Residence

The Department of Music utilizes guest composers, conductors, and performing musicians to enhance its offerings in terms of teaching faculty, forum appearances, and the conducting of musical programs, symposia, and clinics. Some prominent musicians who have appeared in the past are:

Howard Hanson
Norman Dello Joio
Randall Thompson
Virgil Thompson
David Ward-Steinman
Walter Trampler
Fred Hemke
Eleazar de Carvalho
Lukas Foss
Maurice Andre
Jean Pierre Rampal
Adelle Adison
Byron Janis
Louis Bellson
David Samuels
Elliot Schwartz
Julius Baker
Ransom Wilson
Greg Smith
Hale Smith
George Russell
Olly Wilson
Guarneri String Quartet
Beaux Arts Trio
Boris Goldovsky
Greg Smith
Norman Luboff
Garrick Ohlsson
Max Roach
Phil Woods
David Baker
John Cage
Student Organizations:

Sigma Alpha Iota, national professional music fraternity for women, and Phi Mu Alpha Sinfonia, a professional music fraternity for men, are dedicated to serve the cause of music in America. Student Music Educators National Conference is an affiliate of the Music Educators National Conference and is open to all interested students.

Financial Aid:

The University has made available to highly qualified undergraduate students a number of music service awards. Usually these awards cover in-state tuition fees, and are distributed following open auditions held in February and March. The award is made for the following year for two semesters. Out-of-state tuition waiver is also possible. Also available are scholarships awarded in specified areas including Dawn Randall Zimmerman Scholarship, Mary Corey Bogdonas Scholarship. Richey Symphony Society Scholarship Fund, Steve Penovici Scholarship, and the Zbar Award. Available to graduate students who show special potential for creative contribution to the profession are the Graduate Council Fellowships and graduate assistantships and fellowships. Additionally, loans, grants and work programs are available to qualified University of South Florida students. Financial aid is granted on need, academic promise and character.

THEATRE (TAR)

The Department Major:

Through its curriculum and production program, the theatre department offers to seriously interested students the opportunity to prepare themselves for the beginning of a professional career in the Theatre or to continue their studies at the graduate level. In addition, students from other departments and colleges have the opportunity to study and participate in the work of the department, thereby allowing them to gain insight into the creative experience of Theatre.

After a thorough orientation to all facets of the art gained in the basic courses, the theatre major pursuing the Bachelor of Arts degree concentrates in the areas either of performance or of Design and Technology.

To earn a B.A. in Theatre, the student following the Design and Technology Concentration must take a minimum of 51 credit hours. The Design/Technology students are required to take an additional 4 credits (ART 3301C) in the Art Department. These may be applied to the college requirement of 6 credit hours outside the Department but within the college. May also be applied to general distribution requirement Area II.) The student following a Performance Concentration must take a minimum of 50 credit hours. In addition to these, a number of electives in the department may be taken to broaden the general program or to pursue a particular interest in more depth.

To allow for an even greater preparation in professional theatre, a Bachelor of Fine Arts degree is offered. This program allows one of two concentrations: either Performance or Design/Technology. Students will be expected to earn 30 credit hours beyond the B.A. (overall 150 credit hours from the University). Normally the B.F.A. should be accomplished in 10 semesters.

For other non-major requirements see page 122 for the College of Fine Arts requirements and pages 35-36 for the University’s General Distribution and graduation requirements.

Through the production program, which includes various performances for general audiences, children, and department faculty and students, the student has the opportunity to participate in many different ways, thereby gaining practical experience that is essential to his/her development as an artist. The Design/Technology area of Fine Arts Events (see description elsewhere in this section) offers opportunities to the advanced student to work with the professional companies (Dance, Theatre and Music) that come to the campus as a part of the University Artist Series and Dance Residency Program. For all students a broad involvement in all facets of their fields of concentration is encouraged.

Visiting Artists and Artists-In-Residence:

Despite the fact that the University is relatively young the department has had in residence artists from many kinds of theatre and many countries including: London’s West End, The Actor’s Studio, Dublin’s Abbey Theatre, Broadway, Washington’s Arena Stage. The American Shakespeare Festival, The Stratford Ontario Shakespeare Festival, The Welsh National Theatre, The BBC, the London Academy of Music and Dramatic Art, the Working Theatre, Coventry’s Belgrade Theatre, Paris, Hollywood, Moscow, East Berlin’s Deutsches Theater, Taiwan, The Socialist Republic of Armenia and Poland. A partial, alphabetized list would include Edward Albee, Joseph Chaikin, Martin Esslin, Miriam Goldina, Boris Goldovsky, Henry Hewes, Mesrop Kasdeckian, Michael Kirby, Arthur Lithgow, Marcel Marceau, Paul Massie, Siobhan McKenna, Estelle Parsons, Olga Petrovna, Ben Piazza, Sergei Ponomarow, Alan Schneider and Doug Watson.

Requirements for the B.A. Degree with a Major in Theatre

In the total of 120 credit hours for graduation, the student following a Performance Concentration must take a minimum of 50 credit hours, and the student following the Design and Technology Concentration must take a minimum of 51 credit hours within the Department of Theatre. In addition, a maximum of 11 credit hours (Performance Concentration) and a maximum of 10 credit hours (Design/Technology Concentration) may apply to the Theatre Electives Area.

Performance Concentration (50 credit hours minimum)

Suggested Sequence Of Requirements

First Year (11 credit hours)

THE 2020 2 credit hours
TPA 2200 3 credit hours
TPA 2223 3 credit hours
TPP 2110 3 credit hours

Second Year (14 credit hours)

TPP 3111 3 credit hours
TPA 3086 3 credit hours
THE 3110 4 credit hours
TPP 3500 2 credit hours
TPP 3790L 2 credit hours

Third and Fourth Years (25 credit hours)

Theatre *Literature - 3 credit hours and the following:

TPP 4140 4 credit hours
TPP 4150 4 credit hours
TPP 4152 4 credit hours
TPP 4920 3 credit hours
THE 4180 4 credit hours
THE 4562 3 credit hours

Design/Technology Concentration (51 credit hours minimum)

Suggested Sequence Of Requirements

First Year (14 credit hours)

THE 2020 2 credit hours
TPA 2200 3 credit hours
TPA 2223 3 credit hours
TPA 2223 3 credit hours
TPP 2110 3 credit hours

Second Year (17 credit hours)

THE 3110 4 credit hours
TPA 3086 3 credit hours
TPA 4211 3 credit hours
TPP 3111 3 credit hours
ART 3301C 4 credit hours

Third/Fourth Years (24 credits)

Theatre *Literature - 3 credit hours and the following:

THE 4180 4 credit hours
THE 4562 3 credit hours

Choose two (2) of the following combinations (14 credit hours):

TPA 4020 (4 credit hours) and TPA 3221 (3 credit hours)
TPA 4040 (4 credit hours) and THE 4264 (3 credit hours)

TPA 4060 (4 credit hours) and THE 4266 (3 credit hours)

*The Theatre Literature requirement for Performance and Tech/Design majors is to be selected from the following:

THE 4320 3 credit hours
THE 4330 3 credit hours
THE 4401 3 credit hours
THE 4442 3 credit hours
THE 4480 3 credit hours

Freshman Lab and Advanced Course Production Involvement:

TPA 2200, TPA 2223, and TPA 2232 have, in addition to the weekly lectures (3 hours), a weekly 4 hour laboratory.
In certain upper division courses in the Theatre Department, students are expected to involve themselves in scheduled USF productions as a part of regularly assigned class work. The involvements are assigned and may be either construction or running crews or performance work. This ACPI assignment is an integral part of the following courses.

**THE 4264** — History of Costume
**THE 4266** — Architecture and Decor
**TPA 3211** — Lighting: Theory and Practice
**TPA 4020** — Light Design
**TPA 4040** — Costume Design
**TPA 4060** — Scene Design
**TPA 4211** — Stagecraft and Drafting
**TPA 4230** — Costume Construction
**TPP 3500** — Body Disciplines
**TPP 3790L** — Voice Preparation for the Actor
**TPP 4140** — Scene Study II
**TPP 4150** — Scene Study I
**TPP 4152** — Scene Study III

All theatre majors (B.A. and B.F.A.) must satisfy four ACPI’s before they are approved for graduation.

Once the minimum requirement of four ACPI’s has been met by the student, he/she will not be expected to participate in the ACPI requirements of courses so designated.

Students taking an ACPI course for the first time are exempt from the ACPI requirement at their option. Non-majors and Special Students must fulfill ACPI requirements where applicable for their second and subsequent Theatre Department courses.

Academic credit may be given for an ACPI assignment by enrolling in THE 3925 (1 credit).

**Requirement for Minor in Theatre (21 hours minimum):**

- **THE 2020** 2 credit hours
- **TPA 2200** 3 credit hours
- **TPA 2223** 3 credit hours or **TPA 2232** 3 credit hours
- **TPP 2110** 3 credit hours

The remaining 10 hours are to be selected by the student based on personal interest. At least 9 hours must be upper level courses. The Theatre Advisor will be available to assist the student in developing a course of study that will meet the needs of the individual student.

Students desiring admittance into the Scene Study Sequence must audition and those entering the Design Sequence must have a portfolio review.

All Theatre Minors must satisfy two ACPI’s before they are approved for graduation.

All Theatre courses (with the exception of the above mentioned lab courses) are subject to consent of the instructor.

**Requirements for the B.F.A. Degree in Theatre:**

The student should submit a letter of application as early as the second semester of the Junior year. This should be accompanied by a transcript and a detailed description of production involvement.

The student will concentrate in either Performance or Design Technology.

Admission to the B.F.A. program is by audition or portfolio presentation and acceptance by the appropriate faculty committee.

As soon as the B.F.A. candidate has been accepted into the program, the Chairman of the Theatre Curriculum Committee in conference with the student and with the approval of the Department Chairman will select the student’s Advisory Committee. The Advisory Committee will be composed of three members of the Theatre faculty.

This committee has the responsibility to develop a curriculum designed to meet the specific needs of the student and will decide if the following requirements have been met and appropriate standards maintained: (Theatre courses taken prior to the appointment of the B.F.A. Advisory Committee and without the advice of the Committee cannot be considered part of the B.F.A. program.)

Completion of the appropriate Department of Theatre B.A. requirements.

Development and execution of a creative project.

Participation in one summer session.

A minimum of 30 credit hours above the B.A. including 6 credits of non-theatre electives.

**Design/Technology Concentration**

7 hours in Creative Project and Execution:

- **THE 4905** or **THE 5909 (Research & Design Creative Project)**
- **TPP 4012** Project Design: Honors (3 credit hours)

Complete third area of design and prerequisite (7 credit hours) 10 credit hours of additional electives of which 6 must be outside the Department of Theatre.

PLUS 6 credit hours.

- **TPP 4310** Directing I (3 credit hours)
- **THE 4900** Directed Reading (3 credit hours)

**Performance Concentration**

12 credit hours of production preparation through performance classes from the following:

- **THE 4905** 1-4 credit hours
- **THE 4930** 1-8 credit hours
- **TPA 2250** 1 credit hour
- **TPA 3810** 3 credit hours
- **TPA 3840** 4 credit hours
- **TPP 3121** 3 credit hours
- **TPP 3122** 3 credit hours
- **TPP 3255** 3 credit hours
- **TPP 3510** 2 credit hours
- **TPP 4220** 2 credit hours
- **TPP 4310** 3 credit hours
- **TPP 4311** 3 credit hours
- **TPP 4610** 3 credit hours

12 credit hours of additional electives of which 6 must be outside the Department of Theatre.

PLUS 6 credit hours:

- **TPP 4180** Scene Study Honors (3 credit hours)
- **THE 4900** Directed Reading (3 credit hours)
The major objectives of the College of Medicine are, first, to create and maintain an academic environment in which medical education, the production of new knowledge, and community service may be continued in a quality manner. The second objective is to integrate the College of Medicine into the mainstream of the community and to participate in and lead in the upgrading and improvement of the health care standards of the community in which the College is located. The third objective is to function within the framework of the total University as an integral and valued part of the University community.

The philosophy of the educational program at this institution is to provide a strong academic basis for lifetime scholarship in medicine and growth in professional stature for our students, to lay the foundation for service in the practice of their profession; to instill in our students compassion and a sense of devotion to duty to their profession and to their patients; to provide relevance and continuity in instruction among the various disciplines related to medicine; to maintain and increase our students' motivation for community and human service in the practice of their profession; to stimulate the students to demonstrate evidence of initiative and dedication to their chosen profession.

MEDICINE

Students admitted to the College of Medicine, seeking an M.D. degree, are selected on the basis of what appears by present standards to be the best suited for the successful study and practice of medicine. The selection is made by the Admissions Committee composed of members of PreClinical, Clinical faculty, and one senior medical student. Each applicant is considered individually and is judged strictly on his or her own merits. Characteristics evaluated include motivation, integrity, character, and general fitness. These are judged by recommendations of the applicant's PreMedical Advisory Committee as well as other letters of recommendation. The academic record and New Medical College Admission Test furnish an estimate of academic achievement and intellectual competence.

Interviews are arranged for applicants whose qualifications appear to warrant complete exploration.

All inquiries concerning admissions should be directed to the Associate Dean for Admissions, University of South Florida, College of Medicine (Box 3), 12901 North 30th Street, Tampa, Florida 33612.

Requirements for Admission

A minimum of three years of college or university work is required with some preference given to those applicants who present a bachelor's degree from a liberal arts college approved by one of the national accrediting agencies. The minimum requirement is three years of college work (90 semester hours or 135 quarter hours, exclusive of Physical Education and ROTC).

Regardless of the number of years involved in Pre-Medical training, the college credits submitted by the applicant must include the following:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Semesters</th>
<th>Quarters</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Biological Science (including laboratory)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mendelian Genetics (laboratory optional)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>General Chemistry (including laboratory)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Organic Chemistry (including laboratory)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Statistics (mathematics or Social Science)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Physics (including laboratory)</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

With these concepts in mind, a curriculum has been developed which we believe will achieve an effective correlation between the pre-clinical and clinical instructional areas. The curriculum is designed to emphasize conceptually oriented teaching, thus affording the students a challenging and intellectual experience as opposed to a routine and the superficial presentation of a large volume of facts. Relevance to medicine will be emphasized in all areas of instruction in a way recognizable and understandable by the student of medicine. Increased correlation on an interdisciplinary basis will be instituted providing reinforcement between the various fields of study. The curriculum will also provide a close and ongoing experience for the student in the day-to-day and continuing College of Medicine's health care delivery system within the community hospitals and the College of Medicine's ambulatory care facilities. It is anticipated the program will produce graduating physicians who understand and desire the practice of medicine as a fruitful and meaningful choice for a lifetime career of service to their patients and the community.

It is recognized that the program does place heavy demands upon the student. They will be expected to utilize all resources provided by the College, to maintain a consistent level of academic achievement, and to demonstrate evidence of initiative and dedication to their chosen profession.

All applicants must arrange to take the New Medical College Admission Test.

Requirements for Graduation

The awarding of the degree Doctor of Medicine will follow successful completion of the entire required course of study. Appropriate arrangements for post graduate training must be made. Grading of performance in academic subjects will be on an A, B, C, D, F system.

Doctor of Philosophy Degree in Medical Sciences

A graduate program leading to the Doctor of Philosophy degree in Medical Sciences is offered by the Basic Science Departments of the College of Medicine. Information concerning this program may be obtained by contacting the Assistant Dean for Research and Graduate Affairs, College of Medicine, Box 40, 12901 North 30th Street, University of South Florida, Tampa, Florida 33612.

Requirements for Admission

1. Students who seek admission as first-time graduate students to the Ph.D. Program in Medical Sciences of the College of Medicine shall be required to meet the minimal System-wide (State University System of Florida) and University-wide (University of South Florida) entrance requirements.

2. In addition, and/or over and beyond the minimal System-wide and/or University-wide entrance requirements, the applicant while working for the baccalaureate degree, shall have earned a minimum overall grade point average of 3.0 out of a possible 4.0 with a minimum grade point average of 3.0 in the sciences.

3. The applicant shall have a total quantitative-verbal (general) Graduate Record Examination score of 1100 or higher. However, if the applicant takes an advanced (subject) test on the GRE in his or her major and achieves a score of 600 or higher, and achieves a score of 1000 or higher on the quantitative-verbal test, the minimum score of 1100 may be waived under special circumstances.

4. The applicant must have completed the following courses: one year of general biology, one year of general chemistry, one year of general

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physics, one year of mathematics including integral and differential calculus, one year of organic chemistry and a course in quantitative analysis.

5. In addition to course requirements summarized above (Section 4), the department of the chosen discipline of major may require additional course work to be completed before admission into the Graduate Program. Conversely, at the discretion of the faculty of the department of major, specific deficiencies may be corrected through courses taken within a specified period of time. Each such course, as well as the grade obtained in the course, is to be agreed upon by the student's department of major at the time the student is accepted into the Graduate Program.

This information will be communicated to the student and to the Assistant Dean for Research and Graduate Affairs (College of Medicine), prior to the time of regular registration for the term.

6. Except for the System-wide and/or University-wide minimum admission criteria, all other requirements herein summarized (Sections 2-5) under exceptional circumstances, in consideration of the applicant's expected success in the program and in the best collective judgment of the faculty of the department of major, the Graduate Faculty Committee (College of Medicine), and with the concurrence of the Assistant Dean for Research and Graduate Affairs and the Dean of the College of Medicine, may be waived.

COLLEGE OF MEDICINE

Academic Calendar, 1984-85

Class of 1988

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>August 27, 1984</td>
<td>Registration-Classes Begin</td>
</tr>
<tr>
<td>September 3</td>
<td>Monday Registration-Classes Begin</td>
</tr>
<tr>
<td>November 12</td>
<td>Monday Labor Day Holiday*</td>
</tr>
<tr>
<td>November 22-23</td>
<td>Thursday-Friday Thanksgiving Holidays*</td>
</tr>
<tr>
<td>December 14</td>
<td>Monday Classes Resume</td>
</tr>
<tr>
<td>January 2, 1985</td>
<td>Wednesday Last Day of Classes</td>
</tr>
<tr>
<td>Jan. 25, 28, 30</td>
<td>Friday-Monday- Wednesday Final Exams</td>
</tr>
<tr>
<td>February 4</td>
<td>Monday Classes Resume</td>
</tr>
<tr>
<td>March 29</td>
<td>Friday Last Day of Classes</td>
</tr>
<tr>
<td>April 8</td>
<td>Monday Classes Resume</td>
</tr>
<tr>
<td>May 27</td>
<td>Monday Classes Resume</td>
</tr>
<tr>
<td>June 5</td>
<td>Wednesday Memorial Day Holiday*</td>
</tr>
<tr>
<td>June 7, 10, 12</td>
<td>Wednesday Last Day of Classes</td>
</tr>
<tr>
<td>August 26</td>
<td>Friday-Monday- Wednesday Final Exams</td>
</tr>
<tr>
<td>September 2</td>
<td>Monday 2nd Year Curriculum Begins</td>
</tr>
<tr>
<td></td>
<td>Monday Labor Day Holiday*</td>
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Class of 1986

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2, 1984</td>
<td>Monday Clerkship Year Begins</td>
</tr>
<tr>
<td>July 4</td>
<td>Monday Labor Day Holiday*</td>
</tr>
<tr>
<td>September 3</td>
<td>Wednesday Labor Day Holiday*</td>
</tr>
<tr>
<td>November 12</td>
<td>Monday Veteran's Day Holiday*</td>
</tr>
<tr>
<td>November 22-23</td>
<td>Thursday-Friday Thanksgiving Holidays*</td>
</tr>
<tr>
<td>December 14</td>
<td>Friday Last Day of Classes</td>
</tr>
<tr>
<td>January 2, 1985</td>
<td>Monday Clerkships Resume</td>
</tr>
<tr>
<td>March 22</td>
<td>Friday Last Day of Classes</td>
</tr>
<tr>
<td>April 1</td>
<td>Monday Memorial Day Holiday*</td>
</tr>
<tr>
<td>May 27</td>
<td>Monday Clerkships Resume</td>
</tr>
<tr>
<td>June 21</td>
<td>Monday Memorial Day Holiday*</td>
</tr>
<tr>
<td>July 15</td>
<td>Monday Electives Begin</td>
</tr>
</tbody>
</table>

Class of 1987

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>August 27, 1984</td>
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<td>September 3</td>
<td>Monday Labor Day Holiday*</td>
</tr>
<tr>
<td>November 12</td>
<td>Monday Veteran's Day Holiday*</td>
</tr>
<tr>
<td>November 22-23</td>
<td>Thursday-Friday Thanksgiving Holidays*</td>
</tr>
<tr>
<td>December 14</td>
<td>Friday Last Day of Classes</td>
</tr>
<tr>
<td>January 2, 1985</td>
<td>Monday Classes Resume</td>
</tr>
<tr>
<td>January 23</td>
<td>Wednesday Last Day of Classes</td>
</tr>
<tr>
<td>Jan. 25, 28, 30</td>
<td>Friday-Monday- Wednesday Final Exams</td>
</tr>
<tr>
<td>February 4</td>
<td>Monday Classes Resume</td>
</tr>
<tr>
<td>March 29</td>
<td>Friday Last Day of Classes</td>
</tr>
<tr>
<td>April 8</td>
<td>Monday Classes Resume</td>
</tr>
</tbody>
</table>

Class of 1985

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 16, 1984</td>
<td>Monday Electives Begin</td>
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<tr>
<td>September 3</td>
<td>Monday Labor Day Holiday*</td>
</tr>
<tr>
<td>November 12</td>
<td>Monday Veteran's Day Holiday*</td>
</tr>
<tr>
<td>November 22-23</td>
<td>Thursday-Friday Thanksgiving Holidays*</td>
</tr>
<tr>
<td>December 21</td>
<td>Friday Last Day of Classes</td>
</tr>
<tr>
<td>January 2, 1985</td>
<td>Monday Electives Resume</td>
</tr>
<tr>
<td>May 27</td>
<td>Monday Memorial Day Holiday*</td>
</tr>
<tr>
<td>May 31</td>
<td>Friday Electives End</td>
</tr>
<tr>
<td>June 1</td>
<td>Saturday Graduation</td>
</tr>
</tbody>
</table>

*Holidays may be waived for students serving in Clinical Clerkships at the discretion of the individual Chiefs of Service.
Students in the College of Natural Sciences are trained in the tools of logical analysis and the modes of experimentation in the continuing attempt to better understand the nature of man and his relationship to the universe. In all its functions the College is dedicated to fostering a spirit of inquiry and intellectual growth.

The College of Natural Sciences offers programs in biology, including botany, microbiology, and zoology; chemistry; geology; marine science; mathematics; medical technology; and physics. These programs are designed for students planning scientific careers in the science fields or for those planning professional careers having a considerable component of science. These students will typically major in one of the sciences or in a combination of sciences as preparation for employment, transfer to professional schools or admission to graduate school.

In addition, the college administers advising for the preprofessional sciences non-degree program and the medical technology degree program. These programs combine specialized counseling and curriculum planning to assist the student in gaining admission to a professional school or internship program.

**BACCALAUREATE LEVEL DEGREE PROGRAMS**

**Admission to the College**

To be admitted to the College of Natural Sciences a student must make written application and satisfy the admission criteria of the college. Upon admission, the student will be assigned a faculty advisor for counseling and program planning. Students preparing for a science or mathematics career must plan their courses carefully because sequential nature of the science curricula, and students seeking entrance into a professional school or medical technology internship program require specialized counseling. Because of this, immediate application for admission into the college is strongly recommended.

Information on admission criteria, departments, majors, programs, counseling, and other services of the college may be obtained from the office of the Dean, College of Natural Sciences, University of South Florida, Tampa, Florida 33620.

**General Requirements for Degrees**

In addition to the University graduation requirements found on page 36, the requirements for graduation in any undergraduate degree in the college are as follows:

1. Completion of a major program with a grade of "C" or higher in each course. A major program is defined to be courses in a department of concentration plus supporting courses in related departments. All courses in the major program must be taken with letter grade (A, B, C) except those courses which are graded S/U only. For a more detailed description of the major program requirements, consult the appropriate departmental section.

   Certain courses offered in the college are designated for the non-science major or the non-departmental major. These courses are designated "For non-major," "No credit for (department) major," "No credit for science majors," or some similar phrase. For these courses the following rules apply.

   "For non-majors" — For majors in the college, the course will count as credit toward graduation only as a free elective.

   "No credit for (department) major" — the course will not count toward graduation for a science major in the specified department, but will count towards graduation as a free elective for all non-specified departments.

   "No credit for science majors" — the course will not count toward graduation for any major in the college.

2. Satisfaction of the University Distribution Requirement, except:

   (a) In area III, the minimum requirement of six hours in mathematics may be waived by credit in at least six hours of mathematics courses required by the major.

   (b) In area IV, the minimum of six hours in Natural Sciences may be waived by credit in at least six hours of natural sciences courses required by the major.

3. Completion of 15 hours of courses from the Colleges of Fine Arts, Social and Behavioral Sciences, or Arts and Letters. The student may elect any course from any of these colleges provided:

   (a) No more than 9 hours are taken in courses in any one department.

(b) The courses are taken with letter grades (A, B, C, D). Courses taken to satisfy the University Distribution Requirement may not be used to satisfy this requirement. However, "Gordon Rule" writing courses may be used, if not used in GDR.

4. Subsequent to admission to the college, a student must complete at least 30 credit hours of letter graded courses in the college, of which at least 12 hours must be applicable to the major.

   Up to 2 credits of elective physical education, and up to 9 credits in military science courses MIS 1000, 3404, 4421C may count as free electives toward graduation.

   Credits transferred from other schools will not be included in the grade point average computed for graduation.

   For graduation with honors, see page 39.

   The college or department in the college may have specific requirements in addition to those listed in this catalog. College rules or requirements are on file in the dean's office, and departmental rules or requirements are on file in each department office. The student is responsible for meeting all graduation requirements.

5. Satisfactory completion of the College Level Academic Skills Test and the writing and computation course requirements of 6A-10.30.

**Grading Systems**

The College of Natural Sciences will provide some evaluation of performance in all structured undergraduate courses prior to the drop deadline. Typically, courses in the University receive letter grades (A, B, C, D, F, I). However, the college recognizes that educational competence may be achieved and demonstrated by experiences other than classroom attendance leading to letter grades. The attention of the student is directed to the following:

1. CLEP and other advance placement examinations.

2. Waiver by either documentation or examination.

3. Off-Campus Term programs.

4. Cooperative Education Program.

5. Independent Study

6. S/U Graded Courses

   A. With the exception of courses graded S/U only, all courses required to satisfy the departmental major and all supporting courses required by the departmental major are considered in the students' major program and may not be taken S/U. However, once the requirements of the major program have been satisfied, subsequent courses taken in the major or supporting areas are considered free electives and may be taken S/U. All hours required to complete the 15-hour rule must be taken by letter grade.

   B. With the exception of ENC 1101 and ENC 1104, all courses in Distribution Requirements and all courses in free electives may be taken S/U. There is no restriction regarding the number of hours to be taken S/U except the graduation requirement that the student must earn at least 30 credit hours with letter grades in the College of Natural Sciences.

   C. Students will be permitted to enroll in a course by an S/U on the basis of a written contract signed by the student, and the instructor
of the course. This contract must be completed no later than the third week of the semester in which the course is offered.
D. Each instructor for courses in the College of Natural Sciences will provide students with requirements necessary to attain an “S” grade. Essentially, “S” should be equal to a “C” or better.
E. Students transferring from any other college division of the University will be subject to the above requirements.

Programs Leading to the Baccalaureate Degree

The College offers the Bachelor of Arts degree with majors in Chemistry (CHM), Geology (GLY), Mathematics (MTH), Physics (PHY); and Interdisciplinary Natural Sciences (INS) with a concentration in one of the above disciplines or in Biology. The College offers the Bachelor of Science degree with majors in Biology (BIO), Botany (BOT), Microbiology (MIC), and Zoology (ZO0); Chemistry (CHS), Clinical Chemistry (CHC); Geology (GLS), Medical Technology (MET); and Physics (PHS). For specific requirements, consult appropriate departmental sections of this Catalog.

Academic Minor Programs

Academic Minors are offered in the departments of Geology and Mathematics. To complete a minor, a student must satisfy the course requirements found in the departmental sections of this catalog and must satisfy the University requirements found on page 36. In addition, the student must earn a grade of “C” or higher in each course used to meet a minor requirement of departments of the College of Natural Sciences.

PREPROFESSIONAL SCIENCES

The University of South Florida is an excellent location to prepare for a health profession. The Tampa Veterans Administration Hospital, University of South Florida Medical Center, University of South Florida Mental Health Institute, and University Community Hospital are within walking distance of the campus and offer students excellent opportunities for observation, research, and experience.

The College of Natural Sciences offers programs designed to prepare students for admission to professional schools of medicine, osteopathic medicine, dentistry, optometry, podiatric medicine, and veterinary medicine. Usually these programs require four years of preprofessional preparation followed by four years of training in a professional school. A few well prepared students with exceptional qualifications may be admitted to some professional schools as early as the completion of the junior year of preprofessional work. The preprofessional programs do not meet requirements for a degree; however, students should plan to also complete a degree while at UF because professional schools prefer students with a bachelor’s degree, although they do not specify the choice of major. Most preprofessional students major in the sciences because of their interests in the health sciences, and because of the considerable overlap between an optimal preprofessional curriculum and the degree requirements for majors in the biology and chemistry departments. The College also offers two-year programs leading to the A.A. degree that prepare students for admission to programs in the health professions of pharmacy and physical therapy. Entrance into all professional schools or programs is competitive, and students should begin establishing a record of excellence with the first semester at USF. Furthermore, it is essential that students pursue courses developing a sense of understanding of cultural and humane values and basic social problems.

The College of Natural Sciences provides academic advising in the Preprofessional Sciences Advising Office. The office maintains a library of current catalogs and books on admission requirements for professional schools and is an important resource center for preprofessional students. Students considering one of the health professions should contact the College of Natural Sciences during the first semester at USF to declare their interest in a preprofessional sciences program. Students are then assigned to the preprofessional sciences advising office for curriculum planning; and each semester the office provides students with updated academic records. The advisers constitute the Preprofessional Sciences Committee, which evaluates students at the time they apply to professional schools. The Committee’s evaluation is based upon academic record and test scores, individual evaluations submitted by five faculty members, and an interview. The evaluation is important in the admission selection process and is sent to every school where students are applying.

Preprofessional Sciences Program

The Preprofessional Sciences Program is designed to prepare students for admission to professional schools of dentistry, medicine, osteopathic medicine, and podiatric medicine. All of these professional schools have in common the following course requirements, which should be completed by the junior year, the usual time of application:

Biology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 2010C</td>
<td>(4)</td>
</tr>
<tr>
<td>ZOO 2010C</td>
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Chemistry:

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
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<tr>
<td>CHM 2045L</td>
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<td>CHM 2046</td>
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Mathematics:

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<td>MAC 2244</td>
<td>(4)</td>
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Physics:

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<td>PHY 2051</td>
<td>(3)</td>
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<tr>
<td>PHY 2051L</td>
<td>(1)</td>
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</tbody>
</table>

In addition to these requirements it is generally expected that preprofessional students will complete two semesters of English. CLEP credit usually is not acceptable to professional schools.

Premedical students must include the following courses to meet additional admission requirements of medical schools in Florida:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
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<td>STA 3023</td>
<td>(4)</td>
</tr>
<tr>
<td>BCH 3033</td>
<td>(3)</td>
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The following courses are recommended by some professional schools:

Biology:

<table>
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<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
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<tr>
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<td>(4)</td>
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<td>PCB 4184C</td>
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Chemistry:

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<td>(3)</td>
</tr>
<tr>
<td>CHM 3400</td>
<td>(3)</td>
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</tbody>
</table>

Optometry Program

Optometry schools differ somewhat in requirements, but all optometry schools require at least two years of preoptometry studies, and most schools require the following courses:

Biology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>MCB 3010C</td>
<td>(4)</td>
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Chemistry:

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<th>Credits</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>CHM 2046</td>
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<td>CHM 3210L</td>
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Mathematics:

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MAC 2243</td>
<td>(4)</td>
</tr>
<tr>
<td>STA 3023</td>
<td>(4)</td>
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Physics:

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<tbody>
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<td>PHY 2050</td>
<td>(3)</td>
</tr>
<tr>
<td>PHY 2051L</td>
<td>(1)</td>
</tr>
</tbody>
</table>

In addition, some school require MAC 2244, PCB 3700, ZOO 3713C, CHM 3211, CHM 3211L, BCH 3033, PCB 4743C, PSY 2012, PSY 3013, PSY 3213, and a social sciences elective.

Pre-Veterinary Medicine Program

The Pre-Veterinary Medicine program meets admission requirements of the University of Florida College of Veterinary Medicine, the only veterinary school in the state. Admission into veterinary school is highly selective, and to be competitive students should obtain experience working with animals, preferably through employment with a veterinarian. Pre-
Prepharmacy Program

The College offers a two-year program to prepare students for transfer to regional colleges of pharmacy. Prepharmacy students must complete general education requirements and include the following science requirements:

**Biology:**
- BSC 2010 (4)
- ZOO 2010 (4)

**Chemistry:**
- CHM 2045 (3)
- CHM 2045L (1)
- CHM 2046 (3)
- CHM 2046L (1)
- BCH 3033 (3)

**Mathematics:**
- MAC 2243 (4) or MAC 3411 (4)

**Physics:**
- PHY 2050 (3)
- PHY 2050L (1) or PHY 2051 (3)
- PHY 2051L (1)

It is required that students have a minimum of 80 hours including 6 hours of English with one course in composition, 6 hours of social science, 8 hours of humanities, and 8 hours of animal science courses which should be completed at the University of Florida no later than the summer prior to application. Recommended courses are ZOO 3713C (4), ZOO 4693 (4), PCB 4743C (4), and MAC 2244 or MAC 3412.

Pre-Physical Therapy Program

This two-year program prepares students for entrance into upper level physical therapy programs at Florida institutions. Pre-physical therapy students must complete general education requirements and include the following science requirements:

**Biology:**
- BSC 2010C (4)
- ZOO 2010C (4)

**Chemistry:**
- CHM 2045 (3)
- CHM 2045L (1)
- CHM 2046 (3)
- CHM 2046L (1)

**Mathematics:**
- MAC 2243 (4) or MAC 1104 (4) or MAC 3411 (4)

**Physics:**
- PHY 2050 (3)
- PHY 2050L (1)

In addition, some schools require another English course, 3 hours of economics, and 8 hours of electives in humanities and social and behavioral sciences. Prepharmacy students should take the Pharmacy College Admission Test (PCAT) in the fall of the sophomore year and apply to pharmacy schools at that time.

Postbaccalaureate Preprofessional Sciences Program

A special two-year non-degree program is administered by the Preprofessional Sciences Committee of the College of Natural Sciences for students who hold a baccalaureate degree and need additional courses to prepare for application to professional schools. The program is designed for students who have not completed minimal admission requirements as an undergraduate, or who have completed requirements but need to further demonstrate their ability to perform well in the sciences. Students in the program will have the advantage of priority registration in the College of Natural Sciences, and upon completion of the program the
Preprofessional Sciences Committee will send letters of evaluation to the professional schools where the students are applying.

In order to be admitted to the program, students must have a baccalaureate degree and be interviewed by the Preprofessional Sciences Committee. Students must demonstrate to the Committee potential for success through this program by their recent improvement in academic record, performance in science courses, or previous test scores. Students who have a baccalaureate degree from an institution other than the University of South Florida must provide two letters of recommendation.

**GRADUATE LEVEL DEGREE PROGRAMS**

Programs of graduate study are available in every department of the College of Natural Sciences. Students apply for graduate work through the College of Natural Sciences and are recommended for admission by the department in which they intend to concentrate. A departmental committee is appointed which supervises and guides the program of the candidate. The general University requirements for graduate work at the master's level are given on page 51 and for the Ph.D. degree on page 56. The specific requirements for each department are listed under that department below. For further information regarding admission and the availability of fellowships and assistantships a candidate should write to the appropriate departmental chairperson, University of South Florida, Tampa, Florida 33620.

**Master's Degree Programs**

The College of Natural Sciences offers a graduate program leading to the Master of Arts degree in the fields of Mathematics (MTH) and Master of Science degrees in Botany (BOT), Chemistry (CHE), Geology (GLY), Marine Science (MSC), Microbiology (MIC), Physics (PHY), and Zoology (ZOO).

**Doctor's Degree Programs**

The College of Natural Sciences offers five programs leading to the degree of Doctor of Philosophy:

- **Biology (BIO)** — This program leads to the Ph.D. in Biology, including the fields of Marine Biology, Systematics, Behavior, Ecology, and Physiology.
- **Chemistry (CHM)** — This program leads to the Ph.D. in Chemistry, including the fields of Analytical, Biochemistry, Inorganic, Organic, and Physical Chemistry.
- **Mathematics (MTH)** — This program leads to the Ph.D. in Pure and Applied Mathematics.
- **Marine Science (MSC)** — This program leads to the Ph.D. in Marine Science.
- **Oceanography (OCE)** — This cooperative program with Florida State University leads to the Ph.D. in Oceanography.

**College Regulations Governing Graduate Study**

The following regulations are in addition to the University regulations governing study found on pages 51-56.

**Admission.** The College of Natural Sciences requires a minimum of a "B" average in the last two years of undergraduate work and a minimum of 1000 (1100 for marine science applicants) on the Graduate Record Examination for admission to any of its graduate programs.

Applicants with a "B" average in the last two years of undergraduate work or a minimum of 1000 on the Graduate Record examination may be considered for provisional admission subject to departmental recommendation.

Applicants who do not meet either of the above conditions must meet the 10% exception criteria described on page 51 and must have the recommendation of the department offering the degree to be considered for provisional admission.

**Enrollment Levels.** A student who enrolls in eight or more credit hours leading to a graduate degree is classified as a fulltime student.

Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of his/her thesis, or dissertation, he/she shall enroll for not less than three hours of research and/or thesis and/or dissertation each semester other than the summer semester, except that no student shall be required for the purposes of this rule to enroll for more than eight hours total per semester. Additional requirements may be imposed in any department in the college.

A student must be registered for an appropriate load (in no case fewer than three hours) in the college for the semester in which all degree requirements are satisfactorily completed.

**Grade Levels.** To remain in good standing, a graduate student must maintain a cumulative grade point average of at least 3.0. A graduate student whose cumulative grade point average falls below 3.0 will be placed on probation and must meet the college probation requirements to be reinstated in good standing. A graduate student who receives grades below "B" in structured courses required by his advisory committee to meet the structured course requirements of the degree shall be dismissed from the program.

**Registration in Research, Thesis and/or Dissertation Courses.** Registration in courses entitled Directed Research Thesis: Master's, or Dissertation: Doctoral must be with the approval of the major professor and must be commensurate with each student's research plan. A student who enrolls in courses entitled Thesis: Master's but does not submit a thesis or who enrolls in Dissertation: Doctoral but does not submit a dissertation will not be certified for graduation.

**Master's Program.**

A graduate student working on a master's degree in a program in the College of Natural Sciences which requires a thesis must register in course 6971 when engaged in research, data collection, or writing activities relevant to the master's thesis. Advisers should assign the number of credits in this course appropriate to the demands made on faculty, staff, and university facilities, but in no event will the total number of earned thesis credits be less than six. Only six credits of 6971 may be applied to the minimum number of credit hours required for that degree.

**Ph.D. Program**

Following admission to candidacy, a graduate student in a Ph.D. program in the College of Natural Sciences must enroll in course 7980 when engaged in research, data collection, or writing activities relevant to doctoral dissertation. Advisers should assign the number of credits in this course appropriate to the demands made on faculty, staff, and university facilities, but in no event will the total number of earned dissertation credits be less than 16. Students not admitted to candidacy are not eligible to enroll in 7980.

**All Graduate Students**

Students in a graduate program in the College of Natural Sciences must be either active or on a leave of absence granted by the department. Students on active status must register for a minimum of one hour of graduate level course work each semester.

During any semester that a student is utilizing research space, other university facilities, faculty/staff time, or completing any requirements for the degree including thesis (dissertation) defense or approval, the student must register for a minimum of three graduate credit hours.

**Additional Regulations.** Additional regulations concerning graduate study may be found in the departmental sections of this Catalog or are on file in the Office of the Dean. The student is responsible for meeting all requirements of his/her degree program.
TEACHER EDUCATION PROGRAMS

The College of Natural Sciences offers B.A. and M.A. degree programs for secondary school teachers and the M.A. degree for junior college teachers.

B.A. Degree Program for Secondary School Teachers:
The College of Natural Sciences in cooperation with the College of Education offers degree programs in Mathematics (MAE), in Botany (BOE), in Chemistry (CHE), in Physics (PHE), in Zoology (ZOE), and in Science (SCE). Because requirements exist in both colleges, a student will have an advisor in each college. At the outset the planned courses in mathematics and science must be approved by the student’s advisor in the College of Natural Sciences.

There are two options available to the student to satisfy the science portion of the program:
1. The student may complete the requirements of the departmental major. Departmental majors in Botany and Zoology may be found in this section of the catalog under the heading Biology. The departmental requirements of Chemistry, Mathematics, and Physics are found in this section of this catalog under the respective headings in Chemistry, Mathematics, and Physics.
2. The student may complete requirements of the Interdisciplinary Natural Sciences major with concentration in Biology, Chemistry, Physics, and Mathematics. A complete description of this major is found on page 141. This major is particularly appropriate for Science Education majors (SCE).

Prospective students should consult the College of Education portion of this catalog under the heading “Science Education (SCE)” for the required education courses and sample programs.

M.A. Degree Program for Secondary School Teachers:
The College of Natural Sciences in cooperation with the College of Education offers the M.A. degree in mathematics (MAE) and in Science (SCE). In science, concentrations are available in biology, chemistry, and physics. Because requirements exist in both colleges the student will have an advisor in each college. At the outset the planned courses in mathematics and science must be approved by the student’s advisor in the College of Natural Sciences.

The University requirements for the M.A. degree are found on page 51. Mathematics majors must complete a minimum of 34 semester hours; science majors must complete at least 18 semester hours in the discipline of concentration. For requirements in education the student should consult the College of Education portion of this catalog.

M.A. Degree Program for Junior College Teachers:
The M.A. degree program for junior college teachers is available in the College of Natural Sciences with specializations in biology, chemistry, geology, mathematics, or physics.

The student may complete the M.A. degree in a program offered jointly by the College of Natural Sciences and the College of Education. This program requires 24 hours in mathematics or science specialization courses which must be approved by the student’s advisor in the College of Natural Sciences. Credit hours are also required in professional education courses and credits are required in internship depending on the amount of teaching experience of the student. For requirements in education, the student should consult the College of Education portion of the catalog.

CURRICULA

BIOLOGY (BIO/BOT/MIC/ZOO)

In addition to a set of basic courses in biology, students must have a thorough preparation in other areas of natural sciences in order to be competitive for jobs or for further study beyond the baccalaureate. A modern biology curriculum is built on a foundation of mathematics, chemistry and physics.

Four specific Bachelor of Science degrees (Biology, Botany, Microbiology, and Zoology) are available for students interested in the biological sciences. They are all preparatory for careers in teaching, agriculture, medicine, dentistry, marine biology, biotechnology, or for post-graduate study in any of the various life sciences. The Department attempts to schedule sequences of 5000 level courses which allow seniors in the Biology program to concentrate in such areas as: Ecology, Cell & Molecular Biology, Physiology, and Marine Biology. Students should study the requirements listed below and then make maximum use of the vigorous advising program maintained by the Department in structuring their total program. A reading knowledge of a modern foreign language (German, French, or Russian) is strongly recommended for those who intend to enter graduate school.

Requirements for the B.A. Degree

1. Department of Biology Courses
   A. Biology Core Courses (Required for all B.S. degrees, 15 cr. hrs.)
      BSC 2010C (4)
      One of the following:
      BOT 2010C (4)
      ZOO 2010C (4)
      MCB 3010C (4)
      plus
      PCB 3063 (3) and PCB 4023C (4)
   B. Individual Degree Requirements
      BIOLOGY MAJOR (BIO) (25 cr. hrs.)
      One of the following:
      PCB 4743C (4)
      BOT 4503 (4)
      MCB 4404 (4)

   plus one of the following:
      PCB 4184C (4)
      ZOO 4693C (4)

   In addition, a student must choose two courses from the following list:
      PCB 5235C (3)
      PCB 5525C (3)
      ZOO 5235C (4)
      ZOO 3713C (4) or BOT 4223C (3)
      PCB 6816C (3)
      BOT 5725C (4)
      PCB 5835C (3)

   The remaining credits may be taken from courses numbered 4000 or above in the Biology Department. BCH 3033 may apply toward the Biology electives as well as MCB 3010C (if not part of the Core) and 4 hrs. of BSC 4910.

BOTANY MAJOR (BOT) (25 cr. hrs.)
   BOT 2010C (0)
   ZOO 2010C (4) or MCB 3010C (4)
   BOT 4503 (4)
   PCB 4043C (3) or equivalent
   BOT 4933 (1)

   One of the following:
   BOT 4933 (1)
   PCB 4114 (4)

   Of the remaining credits, not less than 8 must be selected from structured Botany (BOT) courses at the 4000 level or above.

MICROBIOLOGY MAJOR (MIC) (23-26 cr. hrs.)
   BOT 2010C (4)
   ZOO 2010C (4)
   MCB 3010C (0)
   MCB 4115 (5)
   APB 4053C (5) or PCB 5235C (3)
   MCB 4404 (4)
   MCB 4505C (3)
   MCB 4934 (1)

   One of the following:
   APB 5575C (4)
   BOT 4434C (3)
   BOT 5405C (3)
   ZOO 5235C (4)
Requirements for the M.S. Degree:

Areas of specialization in any of these degrees include marine biology, ecology (tropical ecology, population ecology, and physiological ecology), molecular biology, physiology (cellular physiology, microbial physiology, neurophysiology), systemsatics and behavior. The M.S. degree requires completion of structured coursework, a research thesis or a review paper, and passing a comprehensive examination.

It is expected that students will have had undergraduate training comparable to that of a USF undergraduate in biology. Any deficiencies completed after admission to the graduate program cannot be used to fulfill degree requirements.

The departmental graduate coordinator functions as the student’s advisor until the student makes arrangements for a faculty member to serve as major advisor. The selection of a major advisor is acceptable to the student by the faculty member. The major advisor and two additional faculty members constitute the student’s supervisory committee which must be established within two semesters after matriculation. Failure to do so will be cause for dismissal. The supervisory committee must be approved by the departmental chairperson and the college dean.

For students enrolled in the thesis program, a 30 credit hour minimum is required at 5000-6000 level; 16 hours must be at the 6000 level; 20 of the 30 credit hours must be in formally structured courses of which 15 hours must be in biology; 10 of the 20 structured hours must be at the 6000 level. All students in the thesis program must complete the graduate seminar (BSC 6935). A maximum of 10 hours of combined thesis, research and seminar may apply toward degree.

For students enrolled in the non-thesis program, a 30-hour minimum is required at 5000-6000 level; 26 hours must be in formally structured courses. 16 hours must be at the 6000 level; 15 structured hours must be in biology. A review paper of a topic approved by the supervisory committee is required.

A final comprehensive examination is required for all students. This examination is open to all departmental faculty and is normally taken after the completion of formal course work, and at least one semester before thesis presentation.

In some cases, the ability to translate pertinent scientific literature from a foreign language must be demonstrated before taking the comprehensive examination.

Any graduate work counted toward fulfilling the requirements for the M.S. degree must be completed within five years after matriculation.

Requirements for the Ph.D. Degree:

General requirements are given on page 56.

A doctoral program in biology is offered. Areas of specialization for the Ph.D. are marine biology, ecology (tropical ecology, population ecology, and physiological ecology), molecular biology, physiology (cellular physiology, microbial physiology, neurophysiology), systemsatics and behavior.

It is expected that students will have had undergraduate training comparable to that of a USF undergraduate in biology. Any deficiencies completed after admission to the graduate program cannot be used to complete graduate requirements.

The departmental graduate coordinator functions as the student’s advisor until the student makes arrangements for a faculty member to serve as major advisor. The selection of a major advisor is acceptable to the student by the faculty member and must be done within 2 semesters after matriculation. Applicants are strongly urged to contact faculty conducting research in the student’s areas of interest. The major advisor and four additional faculty members constitute the student’s supervisory committee. The supervisory committee must be approved by the departmental chairperson and the college dean.

Twenty credit hours are required in structured graduate-level courses, as well as any additional courses necessary to the needs of the student’s program as determined by the supervisory committee. A maximum of six hours may be waived with the approval of the supervisory committee if the student has earned this amount of graduate credit at another recognized university. Individuals who receive the M.S. degree from the Department of Biology at USF may waive up to 10 credits with the approval of the supervisory committee. A total of 90 credits above the baccalaureate must be earned; this includes any graduate credit earned prior to admission to the doctoral program.

Doctoral students must pass a qualifying examination. The written and the oral portions must be taken within 4 semesters after matriculation. Any language or other technical skills required by the supervisory committee must be completed within 4 semesters after matriculation. If the doctoral degree is not awarded within five years after passing the qualifying examination, the examination must be retaken and passed.

Any graduate work counted toward fulfilling the requirements for the Ph.D. degree must be completed within seven years after matriculation.

The student is eligible for admission to candidacy after completion of structured course requirements and passing the qualifying examinations, upon recommendation of the supervisory committee and approval of the Dean of the College and the Director of Graduate Studies. Students must...
CHEMISTRY

The Department of Chemistry offers three degrees at the baccalaureate level, Bachelors of Arts degree in Chemistry, Bachelor of Science degree in Chemistry, and Bachelor of Science degree in Clinical Chemistry, as well as the one who pursues advanced study in chemistry or related areas. The combination of a large and strong faculty, teaching assistants, generally graduate students enrolled in the program, serve as instructors in the laboratories. The Bachelor of Science degree in Chemistry (CHS) is specifically designed to train personnel for this new and growing field of the medical profession; however, the strong scientific background and specific technical expertise provided by this program also afford the student an excellent preparation for graduate study in clinical chemistry, biochemistry, or medicine. Interested students should see the Director of graduate work in chemistry should supplement this curriculum by addition and/or substitution of a selection of advanced courses from the B.S. program.

Graduate Application Deadlines:
Applications must be completed by February 15 for fall applicants who wish to be considered for assistantships. All other applications must be completed by the twelfth week of the semester preceding the one for which application is made.

Applications to the master's program must have a combined score of at least 1000 on the verbal and quantitative portions of the GRE. Applicants to the Ph.D. program must have a combined score of at least 1100 on the verbal and quantitative portions of the GRE and a score of at least 640 on the "Subject (Advanced) Test" of the biology portion of the GRE.

CHEMISTRY (CHS/CHM/CHC)

I. Supporting Courses in the Natural Sciences

B.A. CHEMISTRY (CHM) (26 cr. hrs.)

MAC 3281 (3)   PHY 2050 (3)   PHY 2051 (3)
MAC 3411 (4)   PHY 2050L (1)   PHY 2051L (1)
MAC 3282 (3)

or

MAC 3412 (4)

Electives (must be acceptable for credit towards a Natural Science College discipline major) (8)

B.S. CLINICAL CHEMISTRY (CHC) (38-42 cr. hrs.)

BSC 2010C (4)   MCB 3010C (4)
ZOO 2010C (4)   PHY 4744C (3)
COC 3300 (3)
MAC 3281 (3)
MAC 3282 (3)   or   MAC 3411 (4)
MAC 3283 (3)   or   MAC 3412 (4)
PCB 3700 (5)   or   PCB 4743C (4)
PHY 2050 (3)   or   PHY 3040 (3)
PHY 2050L (1)   or   PHY 3040L (1)
PHY 2051 (3)   or   PHY 3041 (3)
PHY 2051L (1)   or   PHY 3041L (1)

B.S. CHEMISTRY (CHS) (20-23 cr. hrs.)

MAC 3281 (3)   MAC 3411 (4)
MAC 3282 (3)   MAC 3412 (4)
MAC 3283 (3)   MAC 3413 (4)
PHY 3040 (3)   BSC 2010C (4)
PHY 3040L (1)   PHY 3041 (3)
PHY 3041L (1)   PHY 3041L (1)

Physics elective (3000-4000 level except PHY 3020) (3)

The required sequence of Chemistry courses should be started immediately in the freshman year and the mathematics and physics requirements should be completed before the junior year so that CHM 3400 (B.A. degree) or CHM 4410 (B.S. degree) can be commenced at that time. CHM 4410 is a prerequisite also to other advanced courses required for the B.S. degree in chemistry.

II. Requirements for the Baccalaureate Degrees

I. Chemistry Courses*

B.A. CHEMISTRY (CHM) (39 cr. hrs.)

CHM 2045 (3)   CHM 3211 (3)
CHM 2045L (1)   CHM 3211L (2)

CHM 2046 (3)   CHM 3400 (3)
CHM 2046L (1)   CHM 3401 (3)
CHM 3120C (4)   CHM 3402C (1)
CHM 3210 (3)   CHM 3610C (4)
CHM 3210L (2)

Chemistry electives (3000 level or above; may include not more than one hour of CHM 4970) (6)

B.S. CHEMISTRY (CHS) (46 cr. hrs.)

BCH 3033 (3)   CHM 3211 (3)
BCH 2045L (2)   CHM 3211L (2)
BCH 2045 (3)   CHM 4410 (3)
BCH 2045L (1)   CHM 4412 (3)
BCH 2046 (3)   CHM 4410C (4)
BCH 2046L (1)   CHM 4411 (3)
BCH 3120C (4)   CHM 4412 (3)
BCH 3120L (2)   CHM 44610 (3)

B.S. CLINICAL CHEMISTRY (CHC) (49 cr. hrs.)

BCH 3033 (3)   CHM 3211 (3)
BCH 3033L (2)   CHM 3211L (2)
BCH 2045 (3)   CHM 4410 (3)
BCH 2045L (1)   CHM 4412 (3)
BCH 2046 (3)   CHS 4100C (3)
BCH 2046L (1)   CHS 4300 (3)
BCH 3120C (4)   CHS 4301L (1)
BCH 3120L (3)   CHS 4302 (4)
BCH 3120L (2)   CHS 4310C (4)

III. General Distribution Courses

(40 cr. hrs. excluding waivers) The student is required to complete the General Distribution requirements of the College of Natural Sciences. (see page 133).

IV. Liberal Education Electives

The student must satisfy 15 hours of liberal education electives as described in item 3 of the graduate requirements of the College of Natural Sciences. (See page 137).

*CHEMISTRY student who begins a chemical vocation immediately upon graduation as aspects of chemistry.

Graduate Application Deadlines:
Applications must be completed by February 15 for fall applicants who wish to be considered for assistantships. All other applications must be completed by the twelfth week of the semester preceding the one for which application is made.

Applications to the master's program must have a combined score of at least 1000 on the verbal and quantitative portions of the GRE. Applicants to the Ph.D. program must have a combined score of at least 1100 on the verbal and quantitative portions of the GRE and a score of at least 640 on the "Subject (Advanced) Test" of the biology portion of the GRE.

The Bachelor of Science degree in Chemistry (CHS) is a rigorous program which supplies the foundation in chemistry required for both the student who obtains a chemical vocation immediately upon graduation as well as the one who pursues advanced study in chemistry or related areas. In accord with this goal the curriculum for the B.S. degree meets the requirements for degree certification by the American Chemical Society.

The Bachelor of Arts degree (CHM) provides a course of study designed for the student who does not intend to become a professional chemist but whose career goals require a thorough understanding of chemistry. Its design in this program gives the student a high degree of flexibility which permits tailoring a course of study to the student's own educational objectives. As such it offers considerable advantages to pre-professional students planning careers in medicine and the other health-related fields and an excellent preparation for primary and secondary school teachers of chemistry or physical science. The B.A. student whose goals change in the direction of graduate work in chemistry should supplement this curriculum by addition and/or substitution of a selection of advanced courses from the B.S. program.

The Bachelor of Science degree in Clinical Chemistry (CHC) offered by the Department of Chemistry, one of only a few such programs in the country, is specifically designed to train personnel for this new and growing field of the medical profession; however, the strong scientific background and specific technical expertise provided by this program also afford the student an excellent preparation for graduate study in clinical chemistry, biochemistry, or medicine. Interested students should see the Coordinator of the Clinical Chemistry Program in the Department of Chemistry for further information.

In graduate work, the excellent physical facilities and very low student-teacher ratio combine to afford unique opportunities for advanced study in chemistry. In addition to the five traditional fields, analytical chemistry, biochemistry, inorganic, organic, and physical chemistry, research opportunities are also available in such interdisciplinary and specialized areas as bio-organic and bio-inorganic chemistry, clinical chemistry, environmental chemistry, Fourier Transform nuclear magnetic resonance, lasers and photo-chemistry, marine chemistry, photoelectron spectroscopy (ESCA), and pharmaceutical chemistry.

Requirements for the Baccalaureate Degrees

I. Chemistry Courses*
Transfer Requirements for the sequences of chemistry courses, such as general and organic chemistry, for transfer from junior colleges to the University of Florida. It is strongly recommended that students transferring from community/junior colleges to the University of South Florida complete whole sequences of chemistry courses, such as general and organic chemistry, before the transfer. Even though courses may carry the same common course number, topics may vary sufficiently from school to school to leave the transfer student ill-prepared to proceed within a sequence.

Teacher Education Programs:
For information concerning the degree programs for secondary school teachers and junior college teachers, see page 96 and 137 of this catalog.

Requirements for the M.S. Degree:
General requirements for graduate work are given on page 96.

Diagnostic Examinations:
All entering graduate students are required to take a series of diagnostic examinations which are administered during the week prior to enrollment. These examinations are in the five areas of chemistry: Analytical, Biochemistry, Inorganic, Organic, and Physical. A course of study is then agreed upon with each student according to their performance on the diagnostic examinations, their previous academic performance, and their stated academic preferences and goals.

Course Requirements
Each student is required to pass graduate core courses of 3 semester hours each in all five divisional areas as described above. These will contribute to the minimum course requirement of 90 semester hours of which 12 must be in structured 6000-level chemistry courses.

Course Requirements
Each student is required to pass graduate core courses of 3 semester hours each in all five divisional areas as described under the M.S. degree requirements. These will contribute to the minimum course requirement of 90 semester hours of which 12 must be in structured 6000-level chemistry courses.

Language Requirements
A reading knowledge of the chemical literature in any two of the languages—German, Russian, and French (or any other language approved by the supervisory committee) must be demonstrated. As an alternative to one or both of the language requirements the student may demonstrate proficiency in skills or specializations outside the discipline of chemistry but pertinent to scholarly work in chemistry.

Major Comprehensive Examination
A comprehensive examination must be passed in the student’s area of specialization. This examination must be passed within two (2) years from the end of the student's first academic year and one year before graduation.

Admission to Candidacy
Completion of the foregoing requirements admits the student to candidacy for the Ph.D.

The supervisory committee of doctoral students must evaluate the student for admission into candidacy by the end of the three years (six semesters after matriculation). If the committee does not recommend admission to candidacy by that time, it may dismiss the student or grant an extension of one or both of the language requirements. At the end of the additional semester (the 7th semester enrollment, excluding summers), the committee must recommend that the student be admitted to candidacy or dismissed from the program.

Final Dissertation Defense
When the Supervisory Committee has inspected the final draft (final unbound form; typewritten and ready for duplication with the exception of possible minor corrections) of the dissertation and finds it suitable for presentation, the Major Professor will complete a form requesting the scheduling and announcing of the final oral examination. The request form will be submitted via the department chairperson to the College Dean and the Director of the Graduate School at least two weeks before the end of the semester.

The Examination Committee shall consist of a chairperson and the members of the student’s Supervisory Committee including the Major Professor(s). The Chairperson of the Examination Committee shall be appointed by the Dean of the College and shall not be a member of the student’s Supervisory Committee or the department or program in which the degree is sought.

The candidate may expect questions concerning the details and significance of the research after the oral presentation which is open to the public. Final approval of the candidate's degree will require approval by a majority of the Examination Committee, which shall include the Chairperson.

GEOLOGY (GLY)

The Department of Geology offers programs leading to the Bachelor of Arts or Bachelor of Science degree, and to a Master of Science degree. Geology is one of the broadest of all sciences because of its dependence on fundamentals of biology, chemistry, mathematics, and physics as applied to the study of the earth. As a result, undergraduate students are expected to obtain a broad background in the other sciences as well as a concentration in geology.

The Bachelor of Science degree program is designed to provide the geology major with a broad foundation that will prepare the student for employment in industry or with various governmental agencies as well as the necessary training to continue study in graduate school. The Bachelor of Arts program is designed primarily for the liberal arts student who has interest in the subject but is not preparing for a career in the field or for the pre-professional school student. A student who elects the B.A. program and decides to pursue the geology profession or attend graduate school will need at least physics and field geology in his/her program.

The graduate program in geology allows the student to specialize in nearly all of the major areas of concentration. Because of the geographic and geologic location of the University in a rapidly expanding urban center of coastal Florida, there are a number of areas of specialization which are being emphasized. These include coastal geology, hydrogeology, low temperature and pollution geochemistry, applied geophysics, geology of carbonate rocks and phosphate deposits. All of these are closely related to local problems of the environment.
Requirements for the B.A. Degree:

I. Geology Courses (30 sem. hrs.)
- GLY 2016 (4)
- GLY 3610 (4)
- GLY 4550 (3)
- GLY 2100 (4)
- GLY 4200 (4)
- GLY 3400 (4)
- GLY 4220 (5)

A minimum of 2 sem. hrs. from:
- GLY 4920 (1)

II. Supporting Courses (22-28 sem. hrs.)

a. CHM 2045 (3)
- CHM 2045L (1)
- CHM 2046 (3)
- CHM 2046L (1)

b. Two courses in mathematics at 2000 level or above (6-8 sem. hrs.)

c. Two courses in biology or physics selected from:
- BSC 2010C (4)
- BOT 2010C (4)
- ZOO 2010C (4)
- PHY 2050-2050L (4) or PHY 3040-3040L (4)
- PHY 2051-2051L (4) or PHY 3041-3041L (4)

III. General Distribution Courses (40 sem. hrs. excluding waivers)

The student is required to satisfy the General Distribution requirements of the College of Natural Sciences. (See page 133.)

IV. Liberal Education Electives

The student must satisfy 15 hours of liberal education electives as described in item 3 of the graduation requirements of the College of Natural Sciences. (See page 133.)

V. Free Electives (Including Distribution waivers) (29-35 sem. hrs.)

Requirements for the B.S. Degree:

I. Geology
- GLY 2016 (4)
- GLY 3610 (4)
- GLY 4220 (5)
- GLY 2100 (4)
- GLY 4200 (4)
- GLY 3400 (4)
- GLY prefixed structured electives (6)

A minimum of 2 sem. hrs. from:
- GLY 4920 (1)

Field Geology requirement (4-6 sem. hrs.) can be fulfilled by taking GLY 4750 (3) and GLY 5752 (2) Geological Field Excursion or by taking geology summer field course at another institution.

II. Supporting Courses (22-26 sem. hrs.)
- CHM 2045 (3)
- CHM 2045L (1)
- CHM 2046 (3)
- CHM 2046L (1)
- MAC 3281 (3) or MAC 3411 (4)
- MAC 3282 (3) or MAC 3412 (4)
- PHY 2045L (3) or PHY 3040L (3)
- PHY 3040L (1) or PHY 3041L (1)

III. General Distribution Courses (40 sem. hrs. excluding waivers)

The student is required to satisfy the General Distribution requirements of the College of Natural Sciences. (See page 133.)

IV. Liberal Education Electives

The student is required to complete the General Distribution requirements of the College of Natural Sciences on page 133.

V. Free Electives (Including Distribution waivers) 19-25 sem. hrs.

The student will choose, in consultation with his/her Geology adviser, such courses in the College of Natural Sciences that support his/her major interest in the field of Geology. Courses in computer programming and additional Mathematics are of particular value. Those students who anticipate continuing for a doctorate in graduate school are encouraged to take a foreign language, preferably French, German, or Russian.

All geology majors are strongly urged to take a course in technical writing.

All entering students anticipating a major in Geology are advised to enroll in:
- GLY 2016
- CHM 2045
- CHM 2046
- GLY 2100
- CHM 2045L
- CHM 2046L

in the freshman year and to seek curriculum counseling with a Geology adviser.

Minor in Geology

A minor in geology consists of 16 credit hours and must include GLY 2016 and 2100. Additional courses, approved by the geology adviser, are designed to complement the student's major program. Only those courses which are acceptable toward the major in geology may be used toward the minor.

Teacher Education Programs:

Prospective elementary and secondary school teachers desiring to teach science should include basic courses in Geology and related sciences as part of their curriculum.

Requirements for the M.S. degree:

Requirements for admission to the Graduate School and general graduate curriculum guidelines are given on page 137.

Students are admitted for graduate work in Geology if they present the requisite background in Geology and supporting sciences. The bache­lor's degree with a major in Geology or a major in other sciences with strong supporting program in geosciences is required. Students who wish to enter the graduate program in Geology without the proper background will be required to take some undergraduate courses without receiving credit toward their master's program. In addition, a formal summer field course or equivalent professional experience is required.

The curriculum for a Geology graduate student will vary depending on the area of interest of the individual. Course work for the degree will be determined by the thesis committee after consultation with the student.

A minimum of 30 semester hours plus thesis (GLY 6971) is required for the master's degree of which at least 16 must be in courses numbered 6000 and above. 24 semester hours must be in structured courses, 10 of which must be 6000 or above. All graduate students must take Graduate Seminar (GLY 6931) at least two times and GLY 6933 at least once.

All students must have completed one course in each of the following areas at either the undergraduate or graduate level: geochimistry, geophysics, geostatistics, sedimentology, and igneous and metamorphic petrology or their equivalents. All full-time students must register for at least one structured course per semester during their first two years. A written thesis in the student's field of specialization is required. A comprehensive oral qualifying exam is to be taken by the end of the first semester in the program. An oral thesis defense and a public presentation of the thesis are also required.

INTERDISCIPLINARY NATURAL SCIENCES (INS)

The Bachelor of Arts in the Interdisciplinary Natural Sciences major is designed for majors in an interdisciplinary program in the College and for majors in Science Education and Mathematics Education. For information on teacher certification in science or mathematics, prospective teachers should consult the section entitled Teacher Education Programs on page 137, and also consult the College of Education section of the catalog.

The requirements for graduation for this degree are the same as those contained on page 56 except that item 1 of the requirements is altered as follows:

1a. For Science Education and Mathematics Education Majors only completion of a major consisting of a minimum of 45 hours in College of Natural Sciences courses applicable to a major in the College. In these hours there must be a minimum of 24 credit hours in a discipline of major concentration and a minimum of 16 credit hours in supporting courses outside the discipline of major concentration. At least two of the supporting courses must be at the 3000 level or above. The student must earn a grade of "C" or better in each course in the major concentration and in each supporting course.

1b. For College of Natural Sciences Majors only completion of a minimum of 45 hours in College of Natural Sciences courses applicable to a major in the College. In these hours there must be a minimum of 24 credit hours in a discipline of major concentration and a minimum core of supporting courses comprising a calculus sequence and the introductory science sequence from each department in the College outside the discipline of major concentration. Courses in the supporting core must be taken from the following:
- BSC 2010C and one of the following:
  - BOT 2010C
  - ZOO 2010C
  - MCB 3010C
- CHM 2045
- CHM 2045L
- CHM 2046
- CHM 2046L
not receive review but will be automatically updated to the next semester (Fall or Spring only).

Requirements for the M.S. Degree

General requirements are given on page 51. A minimum of 32 credits must include OCC 5050, OCG 5050, OCP 5051, and OCB 5050. A grade of "B" or better must be obtained in each of these core courses. The student may emphasize biological, chemical, geological, or physical oceanography through his/her thesis research and course work. A thesis is required but a foreign language is not.

Requirements for the Ph.D. Degree

The Ph.D. in Marine Science is offered through the Marine Science program at the University of South Florida and through a cooperative program with the Department of Oceanography at Florida State University. Those students opting the cooperative Ph.D. in Oceanography must also apply to FSU will full and original credentialing (application, transcripts, GRE scores, and three letters of recommendation).

Students with exceptional qualifications may be accepted to work directly toward the Ph.D. without first earning the M.S. degree. However, in most cases, the master's degree will be a prerequisite. The latter may have been earned in marine science or one of the related areas, i.e., biology, chemistry, geology, mathematics, or physics.

In addition to the requirements given on page 56, USF Marine Science doctoral program requirements are as follows:

1. OCC 5050, OCG 5050, OCP 5051 and OCB 5050; a grade of "B" or better must be obtained in each of these core courses.

2. The "tools of research" requirement consists of two foreign languages or one foreign language and facility in computer techniques. The Department will administer these proficiency examinations.

3. The qualifying examination will consist of a written and an oral exam. At least four of five examiners must vote to pass the candidate.

In the cooperative USF-FSU oceanography program, a student's committee will be comprised of faculty from both institutions. Residency may be met on either campus. Any member of the graduate faculty at either University (USF or FSU) may serve on a doctoral committee. The committee appointments shall be by agreement between the two department chairpersons (USF and FSU).

MATHMATICS (MTH)

The Departments of Mathematics offers a diversity of courses designed not only to enable the student to pursue a profession in mathematics itself, but also to enhance his competence in the fields of engineering, the physical sciences, the life sciences, and the social sciences. The department offers programs leading to the B.A., M.A., and Ph.D. degrees. The undergraduate program emphasizes the broad nature of modern mathematics and its close associations with the real world. The program is designed to prepare students for entry into graduate school or careers in industry or secondary education.

The department has a flexible Ph.D. program which is designed to encourage students to take an active role in the shaping of their own curricula. This flexibility is coupled with a desire to promote interdisciplinary research. In cooperation with the Departments of Marine Science and Physics, and the Colleges of Engineering and Medicine, the department offers special Ph.D. programs in the applications of mathematics. While programs in the more traditional areas of pure mathematics are offered, the department is committed to emphasizing applied mathematics at both the graduate and undergraduate levels. For both undergraduate and graduate work, students and faculty have access to the University's computer, an IBM 3033.

The Department of Mathematics consists of 31 fulltime faculty members, whose areas of interest include algebra, applied mathematics, applied statistics, approximation theory, celestial mechanics, complex analysis, functional analysis, graph theory, harmonic analysis on Lie groups, logic, mathematical physics, nonlinear functional analysis, number theory, ordinary differential equations, partial differential equations, probability theory, real analysis, statistics, theoretical computer science, and topology.
Requirements for the B.A. Degree

The courses taken to satisfy the Program I and Program II requirements below will constitute the major program referred to in the general graduation requirements of the College of Natural Sciences.

I. Mathematics Requirement (Min. 38 cr. hrs.)

- Majors must complete the following courses and either Program I or Program II.
- **Program I**
  - Three (3) courses (including one sequence) from the following:
    - MAP 4302 (3) MAA 5306-5307 (6)
    - MAS 5146 (3) MAA 5402-5403 (6)
    - STA 4442 (3) MAS 5311-5312 (6)
    - MTG 5316-5317 (6)

**Program II**

- Four (4) courses (including one sequence) from the following:
  - MAP 4302 (3) MAA 5306-5307 (6)
  - MAS 5146 (3) MAA 5316-5317 (6)
  - MAA 5405 (3) MAP 5205 (3)
  - MAD 4401 (4) STA 4442-4321 (6)

Although the following description of Programs I and II is neither exhaustive nor restrictive, it is intended as a general guide. Program I is a liberal arts program designed to prepare a student in pure mathematics which could lead to either graduate study in pure or applied mathematics, a teaching career, or a career where mathematical approaches to problems are needed, such as law or business. Program II emphasizes various areas of applied mathematics which are frequently used in physical and engineering sciences. It could lead to graduate study in applied mathematics, an engineering career, or to a career in industry as an applied mathematician.

Majors in mathematics for teaching should consult the section Mathematics (MAE) on page 49 for mathematics requirements.

The following is a suggested course program for the first two academic years:

**Semester I**

- **Freshman Year**
  - MAC 1104
  - MAC 3412
  - MHF 3102

**Sophomore Year**

- **Junior Year**
  - MAC 3411
  - MAC 3413
  - MHF 3103

Students with a strong background in high school mathematics may omit MAC 1104. Students with a strong background in algebra, but who are deficient in trigonometry, should take MAC 1114 instead of MAC 1104.

II. Mathematics Related Courses (15-20 cr. hrs.)

- Majors, except for majors in mathematics for teaching, must take two of the following sequences, one of which must be in the College of Natural Sciences.
  1. BSC 2010C and either BOT 2010C or ZOO 2010C
  2. CHM 2045, CHM 2045L, CHM 2046, CHM 2046L
  3. GLY 2016, GLY 2100
  4. ECO 2023, ECO 2013, and one of ECO 3101 or ECO 3203
  5. EGN 3373, EGN 3374, EGN 3375
  6. EGN 3343, and one of EMC 3101 or EMC 3117
  7. EGN 3313, EGN 3321, EGN 3331
  8. PHY 3040, PHY 3040L, PHY 3041, PHY 3041L
  9. PSY 2012, PSY 3013, PSY 3213

Majors will not receive credit toward graduation for the following courses:

- AST 3033
- GEB 3121
- ECO 4402
- PHY 3020
- GEB 2111
- STA 3122

Majors wishing to take a course in statistics should take STA 4321.

III. General Distribution Courses (40 cr. hrs. excluding waivers)

- Majors must satisfy the General Distribution requirements of the College of Natural Sciences, which must include (or show competence in) one of the following sequences:
  - FRE 1100, FRE 1101
  - GER 1100, GER 1101
  - RUS 1100, RUS 1101

IV. Liberal Education Electives

The students must satisfy 15 hours of liberal education electives as described in item 3 of the graduation requirements of the College of Natural Sciences. (See page 133.)

Teacher Education Programs:

For information concerning the degree programs for secondary school teachers and junior college teachers, see page 96 and 137 of this Catalog.

Mathematics Minor

Although open to all students, the minor in mathematics is designed particularly for student in science and engineering who wish to enhance their mathematical capabilities to benefit their major. A student wishing to receive a minor in mathematics must take the following courses:

- Total credit hours required: 29 (minimum)
- MAC 3411-3413 (12) Calculus I-III or equivalent
- MAA 3102 (3) Set Theory
- MAS 3103 (3) Linear Algebra
- COP 3215 (3) Introduction to Computer Programming with Mathematics
- Application (or 3 hours of approved programming in BASIC, FORTRAN, or PL 1)
- MAA 4211 (4) Advanced Calculus I
- MAA 4212 (4) Advanced Calculus II

In addition, one sequence from the following:

1. BSC 2010C and either BOT 2010C or ZOO 2010C
2. CHM 2045, 2045L, 2046, 2046L
3. GLY 2016, 2100
4. ECO 2023, 2013, and one of ECO 3101 or 3203
5. EGN 3373, 3374, 3375
6. EGN 3343 and one of EMC 3101 or EMC 3117
7. EGN 3313, 3321, 3331
8. PHY 3040, 3040L, 3041, 3041L
9. PSY 2012, 3013, 3213

Requirements for the M.A. Degree:

General requirements for graduate work are given on page 49. A thesis is optional. The thesis program requires a minimum of 30 credits of course work, of which the thesis carries two to six credits. The non-thesis program requires 30 credits of course work. In either case 16 hours of course work must be taken in courses numbered 6000 or above and the program must total at least 30 credits.

The course of study is flexible and interdisciplinary work is encouraged. Some of the areas of specialization are: algebra, analysis, applied mathematics, computer science, statistics and topology.

Each candidate for the M.A. degree is required to pass three of the ten written examinations listed below in six categories:

1. Algebra (MAS 5146, MAS 5311, MAS 5312)
2. Topology (MTG 5316, MTG 5317)
3. Real Analysis (MAS 5316, MAS 5307)
   - Complex Analysis (MAS 5402, MAS 5403; or MAS 5405, MAS 5403)
4. Probability (STA 5446, STA 5447)
   - Mathematical Statistics (STA 5326)
   - Applied Statistics (STA 5166, STA 5167)
5. Differential Equations (MAP 5407, MAP 5317; or MAP 5316, MAP 5317)
   - Applied Mathematics (MAP 5345, MAP 5407)
6. Theoretical Computer Science (MAD 6510, MAD 6616)

Each examination will cover the prescribed contents of the courses listed above.

A reading knowledge of either French, German or Russian is required. Computer Science may be substituted for the language requirement.

To meet the needs of personnel in business and industry who have advanced training in statistics and computing and who wish to pursue the M.A. in Mathematics, course requirements in statistics and computing will be individually arranged.

Students, however, must take the following courses: STA 5446, MAT 4930 (Special Topics in Computer Programming), STA 5326, MAP 5205, MAD 6407, STA 6208, STA 5166, STA 6746, STA 6876, and MAT 6932 (Modeling Seminar). In addition, all students are required to have Advanced Calculus I and II or their equivalents. The comprehensive...
examination for such students will be modified to fit the program of courses that they have taken.

For specific program requirements, the student should consult the departmental chairperson.

Requirements for the Ph.D. Degree

In addition to the general University requirements for the Ph.D. degree, on page 56, the Mathematics department requires the following:

1. Qualifying Examinations

Each doctoral student must pass four of the ten qualifying examinations that appear under the Requirements for the M.A. degree. The examinations are classified into six categories. The four examinations which the student selects must represent at least three of the six categories shown above under the M.A. requirements, and cannot include both mathematical statistics and applied statistics or both applied mathematics and differential equations.

2. Foreign Language Requirement

Each student must pass an examination in two of the three languages: French, German or Russian. Computer Science may be substituted for one of the languages.

3. Course Requirements

The student's program of study must meet the course requirements for the M.A. degree. In addition the student must pass one semester of course work in five of the six categories listed above. The course can be one of the courses listed or any other course in the same general area if the substitution is approved by a majority of the Department Graduate Committee. Other course requirements will be determined by the student's Supervisory Committee.

4. Supervision Examination

This examination shall be administered by the student's Supervisory Committee after he/she has passed the qualifying examinations, the language requirements, and has completed all course requirements. The composition and scheduling of this examination shall be determined by the Supervisory Committee and may be written and/or oral.

5. For specific program requirements, the student should consult the chairperson of the Department of Mathematics.

6. The student must submit a dissertation to be approved by the Supervisory Committee.

Special accommodations may be made for students with interest in interdisciplinary areas.

MEDICAL TECHNOLOGY (MET)

Medical Technology is one of the growing professions associated with the advances in modern medical science. Working in the clinical laboratory, the medical technologist performs chemical, microscopic, bacteriologic, and other scientific tests to help track the cause and treatment of disease. This talent requires specialized training and a baccalaureate degree as essential preparation for certification as a medical technologist.

The University of South Florida offers a four-year program leading to the Bachelor of Science degree in Medical Technology. A student electing to major in Medical Technology will spend the first three years of the program on the campus of the University of South Florida; the fourth year (12 months) will be spent in one of the affiliated hospitals or clinical laboratories. Admission to the fourth year is limited by the number of openings in the affiliated hospitals. Selection of interns is made by the affiliated hospitals.

During the first three years, the medical technology student will complete the liberal arts and basic science requirements for entrance into the fourth year of the program for clinical training. To remain in good standing as a Medical Technology major during this period, a reasonable grade point average, determined by the College of Natural Sciences, must be maintained. To be eligible for entrance into the program's fourth year, the student must have completed not less than 90 credit hours of work (excluding physical education courses). Of these hours, at least 20 credit hours must be from the College of Natural Sciences.

The fourth year of the program for clinical training usually begins in early August or September of each year. During this period, one will continue to be registered as a full-time student of the University and will receive a total of 30 credit hours of work in:

- MLS 3031
- MLS 4309
- MLS 4605C
- MLS 4215
- MLS 4405
- MLS 4625

These courses will be taught at the hospital or clinical laboratory. Students successfully completing this program will be granted a Bachelor of Science degree in Medical Technology.

PHYSICS (PHY/PHS)

The Department of Physics offers programs leading to a Bachelor of Arts or a Bachelor of Science degree, and to a Master of Science degree. Both thesis and non-thesis programs are available for the M.S. degree.

At present, in addition to a M.S. degree in Physics, we offer two Ph.D. programs: one in Mathematical Physics, in collaboration with the Department of Mathematics; and the other in Engineering Science, jointly with the College of Engineering. Most of the specialty areas in Physics are easily accommodated under these programs. Further, at the Doctoral level, the programs offer the maximum flexibility and they are tailored to suit the interests of the student, and his/her career objectives.

Special courses may be offered upon sufficient demand. Modern excellently equipped classrooms and laboratories provide an outstanding environment for students.

At the graduate level, thesis research areas include theoretical and experimental plasma physics, theoretical and experimental solid state physics, experimental gaseous electronics, elementary particle theory, environmental science and medical physics. Supporting facilities include an 1MB 3033N computer, a Tektronix 4501 graphics systems terminal located in the Physics Building, an excellently equipped machine shop and electronic shop, a glass blowing shop, an electron microscope, and an x-ray photoelectron spectrometer. Teaching assistantships and financial aid are available through the College.

Requirements for the Baccalaureate Degrees:

1. Physics Courses

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<th>B.A. PHYSICS (PHY) (34 cr. hrs.)</th>
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<td>PHY 3040 1</td>
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<td>Physics Electives (7)</td>
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<th>B.S. PHYSICS (PHS) (43 cr. hrs.)</th>
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<td>PHY 3123 (3)</td>
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<td>PHY 3223 (3)</td>
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1 The sequence PHS 310 (2), PHS 2050 (3), PHY 2050L (1), PHY 2051 (3), and PHY 2051L (1) may be substituted for the sequence indicated.

2 Substitutions permitted subject to approval of advisor.
II. Supporting Courses in the Natural Sciences

B.A. and B.S. PHYSICS (20 cr. hrs.)

CHM 2045 (3)  CHM 2046L (1)  MAC 3413* (4)
CHM 2045L (1)  MAC 3411* (4)  MAP 4302 (3)
CHM 2046 (3)  MAC 3412* (4)

*The sequence MAC 3281 (3), MAC 3282 (3), and MAC 3283 (3) may be substituted for the sequence indicated.

III. General Distribution Requirements
(40 cr. hrs. excluding waivers)

The student is required to complete the General Distribution requirements of the College of Natural Sciences (see page 133). Selection of a foreign language, preferably French, German, or Russian is also strongly recommended.

IV. Liberal Education Electives

The student must satisfy 16 hours of liberal education electives as described in item 3 of the graduation requirements of the College of Natural Sciences (see page 133).

V. Free Electives
(Including General Distribution waivers) to complete a 120 hour program.)

Teacher Education Programs:

For information concerning the degree programs for secondary school teachers and junior college teachers, see page 96 and 137 of this Catalog.

Requirements for the M.S. Degree:

General requirements are given on page ... When a student is admitted to the graduate program in physics, the student will consult with the physics Graduate Advisor, who will be the student's course advisor and will also keep a close check on the progress of the student's work. After a decision has been made concerning the student's academic goals, the duties of the Graduate Advisor will be assumed by a Supervisory Committee appointed by the department chairperson. In keeping with the student's academic goals, the Supervisory Committee will determine the appropriate course of study and examinations required for graduation for both the thesis and non-thesis options.

The student desiring the M.S. degree with a thesis is required to take a minimum of 30 credits, no more than six of which may be for PHY 6911, PHY 6935 and PHY 6971. Of these 30 credits, 16 must be in physics courses numbered 6000 or above.

The student desiring the M.S. degree without a thesis is required to take a minimum of 30 credits (excluding PHY 6940), no more than two of which may be for PHY 6911 and PHY 6935. Of these 30 credits, 16 must be in physics courses numbered 6000 or above.
NEW COLLEGE OF USF

New College is a small, residential, top-quality liberal arts college. An honors college within the University of South Florida, New College has been designated a Program of Emphasis by the Board of Regents of Florida and was selected recently as one of 16 "distinguished liberal arts colleges in the U.S." to receive a special endowment from the John D. and Catherine T. MacArthur Foundation.

New College offers talented and highly motivated students the opportunity to work closely with outstanding faculty in designing and pursuing personalized curricula. The program emphasizes independent study and interdisciplinary work. An academic contract system, independent study projects, and narrative evaluations.

The New College Foundation supplements state funding for the college. This enables us to offer an honors program with an 8-to-1 student-to-faculty ratio at state tuition rates. The Foundation raises these funds from foundations, corporations, and individuals.

The Academic Calendar and Residence Requirements

New College operates on a slightly different calendar from the rest of the University of South Florida. There are two fifteen-week semesters and a four-week independent study period in January. Classes begin in late August, and the first semester ends shortly before Christmas. The second semester begins the first week in February, and ends the last week in May.

Students may complete the degree in three and one-half years as a result of the longer academic year and the advanced nature of the program. Students may register for two additional semesters of study if their academic program requires it; they may also take up to two semesters academic leave during their time at the College. By special petition and with summer work, exceptionally talented students may complete the degree requirements in three years. Minimum residence requirements are four contracts, two independent study projects, a senior thesis, and the baccalaureate examination. For transfer students, this means that the maximum transfer credit which can be awarded is three semester contracts and one independent study project.

Educational Program

The educational contract is the basic academic document for a New College student. Each semester the student and sponsor devise a contract; it lists the courses, tutty, potential, and learning styles to our flexible, demanding curriculum which the student has developed during his New College career. The baccalaureate examination is a public examination before a faculty committee in which the student defends his/her thesis and answers questions about its context.

Admissions Requirements

New College welcomes application from all qualified students without regard to nationality, creed, race, or sex. The Admissions Office seeks to match candidates' abilities, potential, and learning styles to our flexible, demanding curriculum. Formulas, cut-off points on tests or grades, and quotas have proven inadequate for this task. Thus the admissions committee will evaluate each folder individually.

Applicants must submit a state university system application, a New College supplementary application, S.A.T. or A.C.T. scores, and academic report, teacher recommendation, and high school transcript(s). Transfer students must submit records of college work as well. A personal interview is highly recommended, and applicants are encouraged to submit any information or samples of previous work that might help the admissions committee evaluate their candidacies.

Generally speaking, the most successful students at New College have scored 550 or better on each of the verbal and quantitative sections of the S.A.T., have taken strong college preparatory courses in high school, and have ranked near the top of their graduating class.

New College welcomes transfer applications. Only liberal arts courses completed with a grade of C or better will be considered when determining a transfer student's status in our academic program. All students must complete at least two years of study on the New College campus in order to be eligible for a Bachelor of Arts degree.

All students must present a score (passing score after August, 1984) on the College Level Academic Skills Test (CLAST), and satisfy state writing and computation course requirements prior to admission into the upper division of the college.

Application forms and literature may be obtained from the New College Admissions Office, 5700 N. Tamiami Trail, Sarasota, Florida 33580.

Application Deadlines:
The New College Admissions Office will process applications on a rolling basis, decisions beginning on or about December 1. Applications will be processed through January 15 for the Spring term, through August 15 for the Fall term provided there are spaces available in the class.

Areas of Study

All New College graduates are awarded the degree of Bachelor of Arts. Students may concentrate in a specific discipline or they may design interdisciplinary or interdivisional majors. New College is divided into three academic divisions: humanities, natural sciences, and social sciences. The disciplines which fall under these divisions are listed below. Further information about the requirements for an area of concentration in a given field may be obtained from the New College Admissions Office.

Humanities
- Art History
- Fine Arts
- Music
- Literature
- Languages
- Classics
- Philosophy
- Religion

Natural Sciences
- Biological Sciences
- Chemistry
- Mathematics
- Physics
- Experimental Physics
- Psychology
- Computer Science

Social Sciences
- Asian Studies
- Anthropology
- Economics
- Government
- History
- Political Science
- Psychology
- Sociology
- Interdisciplinary
- Environmental Studies
- Program

Costs

New College charges the same tuition rates as other institutions within the state university system (see page 20). For accounting purposes, each semester contract is equivalent to 16 semester hours, and each independent study project is equivalent to 4 semester hours. During their first two terms of study, students are considered lower division for fee payment purposes; for the remaining five terms, they are classified as upper division students.
Student Life

New College is a residential institution with the majority of the students living either on campus or in the surrounding community. Students are challenged to accept major responsibilities for the direction of their own affairs, including their social and extracurricular activities. The Student Affairs Office is concerned with student life from orientation of arriving students to commencement plans for those graduating. Student Affairs, through its professional staff, is responsible for counseling, housing, recreation and health services. Staff also is concerned with helping students assume responsibilities in relation to others on campus and in the outside communities.

All first-year students live on campus during their initial academic year. Upper-class students may choose College or non-College residency. Students have the option of using the food service or of making independent arrangements.

New College offers counseling for students in several different areas. It provides for students a small health center on campus, staffed while the college is in session. Excellent specialized medical services are readily available in the community with a community hospital only minutes away from campus. Qualified clinical psychologists provide for students a broad range of psychological counseling and therapy as well as dealing with students concerned about life goals, academic and career decisions, and study skills. Professional medical and psychiatric counsel is available in the community at the student's expense.

NEW COLLEGE OF THE UNIVERSITY OF SOUTH FLORIDA
1984-1985 ACADEMIC CALENDAR

FALL SEMESTER

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 22-24, Wed.-Fri.</td>
<td>Orientation/Registration/Advising</td>
</tr>
<tr>
<td>August 27, Monday</td>
<td>Term I Begins</td>
</tr>
<tr>
<td>September 3, Monday</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>October 15-19, Mon.-Fri.</td>
<td>Fall Break</td>
</tr>
<tr>
<td>November 22-23, Thurs.-Fri.</td>
<td>Thanksgiving Holiday</td>
</tr>
<tr>
<td>December 14, Friday</td>
<td>Term Ends</td>
</tr>
</tbody>
</table>

INTERTERM

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 7, Monday</td>
<td>Interterm Begins</td>
</tr>
<tr>
<td>February 1, Friday</td>
<td>Interterm Ends</td>
</tr>
</tbody>
</table>

SPRING SEMESTER

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 31-Feb. 1, Thurs.-Fri.</td>
<td>Orientation/Registration/Advising</td>
</tr>
<tr>
<td>February 4, Monday</td>
<td>Term II Begins</td>
</tr>
<tr>
<td>March 25-29, Mon.-Fri.</td>
<td>Spring Break</td>
</tr>
<tr>
<td>May 24, Friday</td>
<td>Term II Ends</td>
</tr>
<tr>
<td>May 24, Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>
The College of Nursing is committed to the improvement of nursing and health care services through its educational programs, community service, and related research activities. In order to carry out its commitment in nursing education, the college offers an upper division competency-based program that leads to a Bachelor of Science degree with a major in nursing, and a graduate program that leads to a Master of Science degree with a major in nursing.

The undergraduate program provides for (a) generic students (qualified students with no previous preparation in nursing), and (b) registered nurses, who are graduates of diploma or associate degree nursing programs. The program is designed so that generic students with appropriate preparation equivalent to two years of college can enroll in the nursing major and complete requirements for the degree in four semesters and a summer session of full-time study on the Tampa campus. The curriculum is also designed so that registered nurses are provided with: (a) choices in learning experiences for those with special areas of interest and preparing for a shift in career goals to focus on leadership in nursing and the health care system, (b) a variety of opportunities to validate previous education and experience and to demonstrate achievement of program competencies and (c) opportunities for full-time and part-time enrollment on the Tampa campus or part-time enrollment on the regional campuses at Fort Myers, Sarasota, and St. Petersburg. Registered nurses who attend college as full-time students may complete requirements for the degree in three semesters.

The undergraduate program is accredited by the National League for Nursing and approved by the Florida State Board of Nursing. Graduates of this program are eligible for examination leading to licensure to practice as professional nurses in the State of Florida or to apply for licensure to practice in other states. Graduates also have the educational background necessary for graduate study in nursing.

The major objective of the graduate program is the preparation of professional nurses who will assume leadership roles (a) as clinical specialists in acute health care settings, (b) as adult primary care nurses in ambulatory or extended care settings, or (c) as teachers of nursing, or (d) as clinicians in gerontological nursing. At present the curriculum focuses on adult health nursing and is designed to meet the needs of full and part-time students. The graduate program is accredited by the National League for Nursing.

Applications from all qualified applicants are accepted without regard to age, sex, cultural, racial, religious or ethnic background.

The College of Nursing has quota programs in that limitations are set on enrollments on the basis of availability of sufficient qualified faculty, laboratory and classroom facilities, and clinical resources for nursing practice experience for students. Therefore, admissions are based upon selection processes developed by the faculty of the College of Nursing. Florida residents are given priority.

Professional Nursing

The health care delivery system is rapidly changing and these changes are creating new demands on health care professionals, including nurses. The primary purpose of the College of Nursing is to prepare professional practitioners at the undergraduate and graduate levels. Graduates of these programs perform their functions in a variety of settings to assist clients/patients in maintenance and promotion of health, prevention of disease and restoration to an optimal level of functioning in society.

The faculty believe that man is a holistic being who lives in an ever-changing environment. Throughout the life span, man functions as an individual in a variety of systems, including family, community and society. The potential for wellness at any given point in time is influenced by factors such as: ability to meet needs, cultural determinants, value systems, socioeconomic states, religious beliefs, and interaction with environment. Nursing practice is influenced by environmental variables which make an impact upon professional nursing practice and health care delivery.

Nursing is a professional discipline which demonstrates a set of scholarly, pedagogical, social and political practices carried out by a professional community. Nurses are responsible for performing professional services on the basis of a body of knowledge which is continuously expanding through research.

The conceptual framework for the undergraduate and graduate curriculum is derived from the philosophy and purposes of the College of Nursing. Man, health, environment and nursing are the major concepts from which subconcepts relevant to the profession of nursing are identified. Nursing process, a method of scientific inquiry, provides for the implementation of nursing care in primary, secondary and tertiary care settings.

Goals of the University of South Florida College of Nursing

The College of Nursing is committed to provide a climate of excellence for the acquisition and utilization of knowledge in programs of studies which foster inquiry, autonomy, responsibility and accountability in the preparation of professional nurses at the undergraduate and graduate levels.

1. Attract and retain students who demonstrate potential for leadership in nursing, including those with nontraditional backgrounds who have diverse skills, experiences, and learning preferences.
2. Offer comprehensive curricula that prepare the learner to make an impact on the changing health needs of society.
3. Expand education leading to the first professional degree and at the graduate level, including development of doctoral programs, to prepare nurses to meet predicted societal health care needs.
4. Promote and facilitate lifelong learning opportunities responsive to students, graduates, faculty, community, and regional needs.
5. Be committed to the advancement of knowledge and its application to nursing and health care of people through collaboration with faculty within the University of South Florida, the Medical Center, and with professionals in other health care and community agencies.
6. Promote scholarship and research among students and faculty.
7. Promote faculty development by providing time, resources and programs.
8. Support activities that interpret and promote the role of the professional nurse.
9. Plan for the establishment of a center for research which will provide a resource for the nursing community.

Undergraduate Education in Nursing

Qualified students with no previous preparation in nursing, and registered nurses who are graduates of associate degree or hospital programs are eligible for admission. Students may complete all requirements for admission to the College of Nursing through enrollment at the University of South Florida, or they may complete the University's general education distribution requirements and College of Nursing admission prerequisites elsewhere and transfer to USF for the nursing major. College graduates and transfer students from other baccalaureate nursing programs are also eligible for admission to the major.

Lower division students who enroll at USF are admitted to the Division of Undergraduate Studies. They must meet the same admission requirements as other applicants for admission to the University, and should follow the admission procedures outlined elsewhere in this Catalog.

Transfer students seeking admission to the College of Nursing must also apply for admission to the University. Applications for admission to the University may be obtained by contacting the Office of Admissions, University of South Florida, Tampa, Florida 33620. Transfer students may not be admitted to the College of Nursing unless they are eligible for admission to the University. Official transcripts certifying completion of all requirements for admission must be available to the College of Nursing before admission will be confirmed and enrollment permitted.

At the present time, one class of generic students is admitted in the fall semester of each year. The deadline for University application is January 4 of the year in which the student enrolls. Applications are available from: Office of Admissions, University of South Florida, Tampa, Florida 33620. In addition, a separate application must be submitted directly to the
College of Nursing no later than February 1. College applications are available from: Assistant Dean for Student Personnel, College of Nursing, University of South Florida, Tampa, Florida 33612.

Registered nurse students may be admitted to the College on a more flexible basis contingent upon completion of admission prerequisites and requirements, and the availability of the appropriate sequence of nursing courses on the campus to which they are seeking admission. The deadline for receipt of an application from registered nurse students is at least one (1) semester in advance of the semester in which they intend to enroll. For more specific information contact the Assistant Dean of Student Personnel.

GENERAL REQUIREMENTS

Admission Requirements and Course Prerequisites

The minimum academic requirements used as a basis for evaluating eligibility of applicants for admission to the upper division major are outlined below.

A. Overall Requirements

1. Completion of 60 semester hours of college level work with a cumulative grade point average of 2.5. Credit received on the basis of CLEP or Advanced Placement examinations or other appropriate procedures may be included to meet some of these requirements.

2. Completion of the University of South Florida general education distribution requirements as part of the above. These requirements may be satisfied by the completion of 40 semester hours in the following areas with not less than 6 semester hours in each area:
   a) English Composition
   b) Humanities/Fine Arts
   c) Mathematics/Quantitative Methods*
   d) Natural Sciences*
   e) Social Sciences*

3. Students with an A.A. degree (other than in nursing) will be considered to have met all of the USF General Education Distribution requirements but also must meet specific college requirements in the areas marked "*".

4. Satisfactory completion of the College Level Academic Skills Test and the writing and computation course requirements of 6A-10.30.

B. Specific Course Prerequisites

The College of Nursing requires certain courses within the general education distribution for the natural, social and behavioral sciences, and mathematics. These requirements are outlined below. The student must:

1. earn a grade of "C" or better in each course, 2) repeat no course more than once, 3) repeat no more than two (2) courses. Suggested courses are also included. Courses taken at another institution will be evaluated individually on the basis of content. Students in Florida community colleges can obtain information about equivalent courses from their counselors or by contacting the College of Nursing Assistant Dean for Student Personnel (813/974-2191).

1. Mathematics/Quantitative Methods: completion of at least one course in mathematics and one course in statistics. CLEP subject exams are acceptable.
   a) Mathematics—one course in college level algebra must be completed with a grade of "C" or better.
   b) Statistics—one course in statistics must be completed with a grade of "C" or better. STA 3122

2. Natural Sciences: minimum of 14 semester credits (excluding anatomy, microbiology, and physiology). Each course taken toward meeting this requirement must have been completed with a grade of "C" or better. At least one course must include a laboratory or have a corequisite laboratory course. At least 6 semester credits must have been completed by the admissions application deadline.
   a) Biology—a minimum of 6 semester credits. Courses should include content in 1) cell theory, 2) biological transport, 3) genetics, 4) evolution, 5) phylogenetic survey of plant and animal kingdoms, 6) ecology, etc. CLEP is acceptable.
      BSC 2102C, BOT 2102C, ZOO 2002C
   b) Chemistry—A minimum of 6 semester credits. Courses should include content in 1) principles of chemistry, 2) structure of matter, 3) atomic and molecular structure, 4) states of matter, 5) chemical formulas and nomenclature, 6) solutions, 7) chemical kinetics and equilibrium, 8) theory and practice of quantitative analysis, 9) organic chemistry.
   c) Microbiology—one course. CLEP is not acceptable.
      APB 3100 or MCB 3101C

   d) Anatomy and Physiology—one course. A combined course in anatomy and physiology which is equivalent to PCB 3700 is acceptable or individual courses.

3. Social Sciences: completion of each of the following with a grade of "C" or better in each course.
   a) American government—one course in modern American government or state and local government. CLEP is acceptable.
      POS 2041, POS 2112, PAD 3003, POT 4204, POS 4424
   b) Individual and Social Community Behavior: completion of at least three courses with at least one course in psychology and one course in sociology and one additional course in biology, sociology, anthropology, gerontology or human sexual behavior. CLEP is acceptable.

4. Supporting Sciences: Anatomy, microbiology and at least two of the other courses must be completed prior to enrollment in the nursing major with a grade of "C" or better in each course. The remaining course must be completed during the first semester of the nursing major.
   a) Microbiology—one course. CLEP is not acceptable.
      APB 3110 or MCB 3101C
   b) Anatomy and Physiology—one course. A combined course in anatomy and physiology which is equivalent to PCB 3700 is acceptable or individual courses.

   c) Nutrition—one course. College of Nursing Challenge Examination or University of Florida correspondence course are acceptable.
      HUN 3201

   d) Human Growth and Development (Life Span)—Must include birth through aging process to death. CLEP is not acceptable.
      HUS 4020 or DEP 3103 and GEY 3000 or DEP 4005 and GEY 3000.

   N.B. Each of the above supporting science courses is not offered every semester, therefore, the student should plan their enrollment schedule with care.

C. CLEP Examinations

In accordance with University policies, College Level Examination Program (CLEP) general and subject examinations may be taken in several areas. The CLEP general examinations apply toward the distribution requirements at USF, and successful performance results in credit for any one or all five of the required areas. In addition, credit may be earned for a number of College of Nursing prerequisite courses, including: American Government POS 2041; English Composition ENC 1101, 1102; Biology BSC 2101C, BOT 2101C, ZOO 2101C; General Chemistry CHM 2045; and Statistics STA 3122. Additional information may be obtained from the Office of Evaluation and Testing, University of South Florida.

D. ACT/PEP and College of Nursing Examinations

Successful completion of the following examinations(s) can be used to fulfill course requirements as designated below:

1) College of Nursing—Nutrition Challenge Examinations: a total of 3 semester credits can be earned by any undergraduate student to meet the course requirement in nutrition. Information about the college examination in nutrition may be obtained by contacting the Dean's Office, College of Nursing, University of South Florida.

2) Registered nurses who are graduates of diploma programs may receive 20 semester general elective lower division credits toward successful completion of the ACT/PEP examinations in nursing. These credits do not apply toward meeting the University
requirement of 40 upper division credits, or toward meeting the requirements of the upper division nursing major. The credits earned by passing the ACT/PEP examinations in nursing apply only to the B.S. degree with a major in nursing program offered by the College of Nursing. Additional information about the CLEP and ACT/PEP examinations may be obtained from the Office of Evaluation and Testing, University of South Florida.

3) Registered nurses who are graduates of associate degree programs may receive up to 20 semester general elective lower division credits for their previous nursing education.

4) Both generic and registered nurse students may earn up to 6 semester credits and fulfill the college’s prerequisite requirement in anatomy and physiology through successful completion of the ACT/PEP examination in anatomy and physiology.

E. Other Requirements
In order to be considered for admission to the college, the applicant must:

1) have submitted application to USF by the appropriate deadline.
2) have submitted application and all supporting materials, including transcripts, to the College of Nursing by the appropriate deadline.
3) have a minimum grade point ratio of 2.5 with a grade of "C" or better in each prerequisite course.
4) be able to complete prior to enrollment in the major all those general education and specific prerequisites required for admission to the major.
5) have completed all prerequisites with not more than two (2) repeated courses and not more than one (1) repeat of any given prerequisite course.
6) have current licensure in Florida if enrolling in the program as a registered nurse.

In addition to the minimum requirements listed above, applicants will be evaluated on factors which are relevant to program completion and professional nursing practice: cumulative grade point average, performance in specific courses, and ability to communicate verbally and in writing. All applicants who appear to be eligible for admission may be interviewed.

Those applicants with the highest total rankings are accepted in order until the quota is filled. As vacancies occur prior to the enrollment date, those next on the list are accepted to fill them. Enrollment of all students is contingent upon verification through official transcripts of satisfactory completion of all requirements for admissions.

**DEGREE REQUIREMENTS**

Students will be certified for the Bachelor of Science degree with a major in nursing upon completion of a minimum of 126 semester hours composed of general education requirements, science prerequisites (physical, biological, social and political), upper division and nursing electives, and required nursing courses.

A minimum grade of "C" or better must be attained in each course in the major and cumulative grade point ratio of 2.0 or better must be maintained throughout the program. At least 40 semester hours must be upper division level work (courses numbered 3000 or above).

**Nursing courses - Generic Students**

**Junior Year (3 semesters)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUU 3500</td>
<td>Nursing Core I (3)</td>
<td></td>
</tr>
<tr>
<td>NUU 3612</td>
<td>Nursing Process I (3)</td>
<td></td>
</tr>
<tr>
<td>NUU 3612L</td>
<td>Nursing Intervention I (2)</td>
<td></td>
</tr>
<tr>
<td>NUU 3722C</td>
<td>Client Assessment I (2)</td>
<td></td>
</tr>
<tr>
<td>NUU 3501</td>
<td>Nursing Core II (2)</td>
<td></td>
</tr>
<tr>
<td>NUU 3130</td>
<td>Nursing Process II (2)</td>
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<tr>
<td>NUU 3130L</td>
<td>Nursing Intervention II (3)</td>
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<td>NUU 3321</td>
<td>Nursing Process III (2)</td>
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<tr>
<td>NUU 3321L</td>
<td>Nursing Intervention III (2)</td>
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</tr>
<tr>
<td>NUU 3723C</td>
<td>Client Assessment II (2)</td>
<td></td>
</tr>
<tr>
<td>NUU 3502</td>
<td>Nursing Core III (2)</td>
<td></td>
</tr>
<tr>
<td>NUU 4430</td>
<td>Nursing Process IV (1)</td>
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<tr>
<td>NUU 4430L</td>
<td>Nursing Intervention IV (1)</td>
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<tr>
<td>NUU 4636</td>
<td>Nursing Process V (2)</td>
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<tr>
<td>NUU 4636L</td>
<td>Nursing Intervention V (3)</td>
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**Senior Year (2 semesters)**

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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NUR 4505</td>
<td>Nursing Core IV (2)</td>
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</tr>
<tr>
<td>NUR 4651</td>
<td>Nursing Process VI (2)</td>
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<td>NUR 4651L</td>
<td>Nursing Intervention VI (2)</td>
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</tr>
<tr>
<td>NUR 4652</td>
<td>Nursing Process VII (2)</td>
<td></td>
</tr>
<tr>
<td>NUR 4652L</td>
<td>Nursing Intervention VII (2)</td>
<td></td>
</tr>
<tr>
<td>NUR 4653</td>
<td>Nursing Process VIII (2)</td>
<td></td>
</tr>
<tr>
<td>NUR 4653L</td>
<td>Nursing Intervention VIII (2)</td>
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</tr>
<tr>
<td>NUR 4506</td>
<td>Nursing Core V (3)</td>
<td></td>
</tr>
<tr>
<td>NUR 4943L</td>
<td>Preceptorship (6)</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the requirements listed above, a minimum of 10 credits in upper division electives will be required for graduation: at least six (6) credits in upper division courses in general education (courses in arts, humanities, natural or behavioral sciences, economics, business or management, education, etc., are acceptable) and at least four (4) credits in nursing electives (NUR 4930, Selected Topics in Nursing, and/or NUR 4910C, Independent Study in Nursing, are currently used for this purpose).

**Nursing Courses - Registered Nurse Students**

**3 semesters**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NUU 3500</td>
<td>Nursing Core I (3)</td>
<td></td>
</tr>
<tr>
<td>NUU 3722C</td>
<td>Client Assessment I (2)</td>
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</tr>
<tr>
<td>NUR 3641</td>
<td>Nursing Process in Primary Care (3)</td>
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<tr>
<td>NUR 3641L</td>
<td>Nursing Practicum I (3)</td>
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</tr>
<tr>
<td>NUR 4504</td>
<td>Intermediate Core (4)</td>
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<tr>
<td>NUR 4654</td>
<td>Nursing Process in Complex Situations (4)</td>
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<tr>
<td>NUR 4654L</td>
<td>Nursing Practicum II (4)</td>
<td></td>
</tr>
<tr>
<td>NUR 4506</td>
<td>Nursing Core V (3)</td>
<td></td>
</tr>
<tr>
<td>NUR 4943L</td>
<td>Preceptorship (6)</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the requirements listed above, a minimum of 10 credits in upper division electives are required for graduation: at least six (6) credits in upper division courses in general education (courses in arts, humanities, natural or behavioral sciences, economics, business or management, education, etc., are acceptable) and at least four (4) credits in nursing electives (NUR 4930, Selected Topics in Nursing and/or NUR 4910 C, Independent Study in Nursing are currently used for this purpose).

**Graduate Education in Nursing**

The College of Nursing offers a program leading to the Master of Science degree with a major in nursing, focusing on adult health, gerontological, or psychiatric-mental health nursing. The major objective is the preparation of professional practitioners who can assume leadership roles in nursing as 1) clinical specialists in secondary or tertiary health care settings, 2) primary care practitioners in ambulatory or extended care settings, or 3) teachers of nursing.

The program comprises 1) theoretical foundations of advanced nursing practice (nursing theory, physiology, social and behavioral sciences, etc.), 2) role theory and development, 3) research (including thesis or scholarly study), 4) clinical experience in the management of patient care and application of theory in practice related to the functional minor, and 6) electives in nursing or related disciplines. The program provides core requirements for all students with flexibility for student options based on individual background and needs.

Students may opt to focus on an area of clinical specializations (e.g., metabolic nursing, cardiovascular nursing, oncological nursing), depending upon availability of qualified faculty and appropriate clinical resources for related practice and research. Students electing the functional minor in teaching will be required to take courses in measurement and evaluation, curriculum and instruction, and university or community college education. In addition to the core courses and the clinical practicum, a teaching practicum is designed to meet the student’s need, e.g., a practicum in inservice education or in clinical and classroom teaching in associate degree or baccalaureate programs.

Additional requirements for clinical specialists and primary care practitioners include a course in management plus electives selected from course offerings in other colleges and departments of the University.

**Admission Requirements**

Admission to the program is dependent upon favorable evaluation of the graduate faculty in relation to admission criteria. Applicants must...
meet the minimum requirements of the University and those outlined below. Registered nurses with a baccalaureate degree in nursing may enroll in selected courses as non-degree seeking students on a space available basis. A maximum of 12 semester hours of work attempted as a special student may be accepted as credit toward graduation if the student meets admission requirements and is accepted into the program.

A new class is admitted semester 1 of each year. Transfer students are admitted in January. Admission to the program is on a competitive basis and is based on admission criteria and availability of adequate facilities and faculty. Applicants seeking admission for the Semester I must have all admission materials on file with the Office of Admissions no later than March 15, of that year.

Criteria for Admission

1. A baccalaureate degree in nursing from an NLN accredited program with an overall grade point average of 3.0, or
   A minimum score of 1000 on the verbal and quantitative portion of the G.R.E. (SUS guidelines apply. All students must present GRE scores.)
2. A score of 46 or above on The Miller Analogy Test.
4. A minimum of one year's experience in clinical nursing practice.
5. Three letters of reference indicating potential for graduate study from professional nurses who can attest to the applicant's ability and professional competence.
6. A course in elementary statistics including introduction to probability and testing hypotheses. (Comparable to USF course STA 3122 in Social and Behavioral Science)
7. Ability to demonstrate competencies in physical assessment skills comparable to those required in NUR 3722C (a challenge exam is available).
8. Preference is given to Florida residents.
9. Record of physical examination prior to enrollment.
10. Current professional liability coverage.
11. Admission to program will be dependent on availability of adequate facilities and faculty in addition to the above stated criteria.

Application Process

1. Complete and submit application forms to the Office of Admissions at USF.
2. Provide necessary transcripts of all previous college work.
3. Provide results of scores on the Graduate Record Examination and The Miller Analogy Test.
4. Attend a group advisement session at the College of Nursing.
5. Complete a personal interview with designated College of Nursing faculty.
6. Submit letters of reference as indicated under criteria for admission.

Course Requirements

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGR 6121</td>
<td>Theory Development in Nursing</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR 6030C</td>
<td>Adult Assessment</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR 6140</td>
<td>Advanced Physiologic Assessment</td>
<td>(4)</td>
</tr>
<tr>
<td>*PUP 5607</td>
<td>Public Policy and Health Care</td>
<td>(4)</td>
</tr>
<tr>
<td>NGR 6703</td>
<td>Advanced Role Development</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR 6141</td>
<td>Advanced Pathophysiology</td>
<td>(2)</td>
</tr>
<tr>
<td>NGR 6800</td>
<td>Nursing Research</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR 6200C</td>
<td>Adult Nursing</td>
<td>(5)</td>
</tr>
<tr>
<td>NGR 6971</td>
<td>Thesis: Master's, or Independent Study</td>
<td>(1-6)</td>
</tr>
<tr>
<td>NGR 6905</td>
<td></td>
<td>31-36</td>
</tr>
</tbody>
</table>

**Elective: Related courses in Health Care Delivery may be substituted.**

**Adult Primary Care Nurse**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGR 6945</td>
<td>Practicum in Clinical Nursing I</td>
<td>(4)</td>
</tr>
<tr>
<td>NGR 6946</td>
<td>Practicum in Clinical Nursing II</td>
<td>(4)</td>
</tr>
<tr>
<td>NGR 6150</td>
<td>Pharmacology for Advanced Nurse Clinicians</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>Management elective</td>
<td>(3-4)</td>
</tr>
<tr>
<td></td>
<td>Open electives</td>
<td></td>
</tr>
</tbody>
</table>

**Clinical Specialist**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGR 6945</td>
<td>Practicum in Clinical Nursing I</td>
<td>(4)</td>
</tr>
<tr>
<td>NGR 6946</td>
<td>Practicum in Clinical Nursing II</td>
<td>(4)</td>
</tr>
</tbody>
</table>

**Nursing Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGR 6945</td>
<td>Practicum in Clinical Nursing I</td>
<td>(4)</td>
</tr>
<tr>
<td>NGR 6947</td>
<td>Practicum in Nursing Education</td>
<td>(4)</td>
</tr>
<tr>
<td>NGR 6710</td>
<td>Curriculum &amp; Instruction in Nursing Ed.</td>
<td>(2)</td>
</tr>
<tr>
<td>NGR 6712</td>
<td>Nursing Ed. in Institutions of Hi. Ed.</td>
<td>(2)</td>
</tr>
<tr>
<td>EDF 6431</td>
<td>Foundations of Measurement</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Clinician in Gerontological Nursing**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGR 6250</td>
<td>Gerontological Nursing I</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR 6251</td>
<td>Gerontological Nursing II</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR 6253</td>
<td>Gerontological Nursing Practicum I</td>
<td>(4)</td>
</tr>
<tr>
<td>NGR 6254</td>
<td>Gerontological Nursing Practicum II</td>
<td>(4)</td>
</tr>
<tr>
<td>GEY 5630</td>
<td>Economics and Aging</td>
<td></td>
</tr>
</tbody>
</table>

**Graduation Requirements**

1. A minimum of 48 semester hours.
2. A thesis or major scholarly work is required of all candidates.
3. A minimum cumulative grade point average of B (3.0).
4. A minimum grade of C (2.0) in each course accepted toward the graduate degree.
5. A minimum grade of B (3.0) in all undergraduate courses (1000-4000 level) taken after matriculation as electives or to make up deficits. Grades for these courses are not computed in the overall academic average.
6. All incomplete grades must be removed from the student's record before graduation.
7. Degree requirements must be completed within seven (7) years of matriculation, the date on which a student formally enrolls for study after having been accepted. Candidates who are unable to meet this requirement may petition to have their credentials and program re-evaluated. Such candidates must expect to meet any requirements which have been added since their original matriculation.
8. Application for the degree must be filed with the University Registrar on the appropriate form signed by appropriate College of Nursing personnel. The degree candidate is responsible for obtaining and submitting the degree application form by the date specified by the University.

The College of Nursing reserves the right to alter aspects of the Master of Science Program on the basis of on-going curriculum evaluation by faculty and students.

**Special Requirements**

Tuition and fees for students enrolled in nursing are the same as for other students at the University of South Florida. However, there are substantial expenses not covered by the basic tuition and fees.

Textbooks, laboratory manuals and standardized tests are essential tools for students enrolled in the nursing major. Texts in nursing are somewhat more expensive than those in general education, and it is estimated these costs run from $100-150 per semester. These costs are somewhat higher at the junior level.

Uniforms, including watch with sweep second hand, scissors, shoes, stethoscope, etc., are required after the first semester of the junior year. Uniform specifications and policies have been developed by students enrolled in the first class, and costs vary depending upon personal choice. In addition, lab coats or aprons are necessary during the first semester. Graduate students must have access to physical assessment equipment including ophthalmoscope and stethoscope, etc.

Medical care and hospitalization insurance is required. Professional liability insurance is highly desirable for all and required for registered nurse and graduate students.

An annual physical examination is required. The first one must be done prior to enrollment in the nursing major.

Transportation to and from community health agencies for clinical
nursing experience is also the responsibility of the student. Since public transportation in the Tampa area is not usually convenient to the hours of clinical schedules, students must have access to some other means of transportation, or from car pools. Also, from time to time, field trips to an institution or agency at some distance from the campus will be required for an entire class or section of a class. In these instances, students making the trip share the costs.

Financial Aid

Policies and procedures pertaining to financial aid are the same for students in nursing as for other students. Specific information can be obtained from the Office of Financial Aid, Student Affairs, University of South Florida, Tampa, Florida 33620.
The College of Public Health offers the Master of Public Health degree and the Master of Science in Public Health degree. Planning is underway for a doctoral program in public health with an anticipated implementation date of July 1985.

Students are admitted directly into the Master of Public Health and Master of Science degree programs. Students from other USF graduate programs, as well as special students, are also eligible to enroll in Public Health courses. A collaborative Master of Public Health degree program is being developed between the University of South Florida and the University of Central Florida to permit cross-registration and enrollment of students in selected public health courses of each University.

Objectives of the Public Health Masters' Degree Programs

General Objectives

Every effort is made in the Public Health program to link coursework, field experience, and project and thesis requirements with the numerous and serious public health problems and needs facing the State, the nation, and other countries. These problems and needs relate directly to population dynamics, to the introduction of new types and patterns of disease within the population, to the availability of knowledge on health promotion and disease prevention to various population groups, and to the planning, marketing, and management of health services delivery systems for all citizens of the State. It is intended that course content will be directly related to addressing and meeting public health needs.

Student Learning Objectives

The College of Public Health provides academic programs through which each student working towards a Master of Public Health degree or Master of Science in Public Health degree will develop an understanding of the areas of knowledge that are basic to public health. These areas encompass:

- Biological, physical, and chemical factors which affect the health of a community.
- Concepts and methods of relevant social and behavioral sciences.
- Distribution of diseases or conditions in populations and factors that influence this distribution.
- Collection, storage, retrieval, analysis, and interpretation of health data.
- Planning, policy analysis, and administration of health programs.

The USF College of Public Health provides opportunities for professional degree students to achieve these learning objectives through coursework subjects in:

- Environmental and occupational health sciences
- Social and behavioral sciences
- Epidemiology
- Health statistics
- Health systems planning, organization, and management

In addition, field experience, special projects, and other approaches to application of knowledge and skills are offered to all students and are required for those students without previous substantial work experience in public health.

Requirements for Admissions

Student applicants to either the Master of Public Health program or the Master of Science in Public Health program will be required to satisfy the general requirements for all University of South Florida Graduate Programs and special requirements for the Public Health Masters' degree programs. These requirements are discussed in the Graduate School section of the catalog.

In addition, in order to be considered for admission to the College of Public Health, a first-time graduate student or a student transferring from a graduate program at another university must have at least a Bachelor's degree or equivalent from a regionally accredited university and meet at least one of the following criteria:

1. Shall have earned a "B" average or better in all work attempted while registered as an upper division student working for a baccalaureate degree, or
2. Shall have a total quantitative-verbal Graduate Record Examination score of 1000 or higher or an equivalent score on an equivalent measure approved by the Board of Regents, or
3. Shall have earned a prior graduate degree from a regionally accredited institution.

In addition an applicant must be approved by the College of Public Health Admissions Committee. At the present time, four concentration or specialty areas are available to students: epidemiology and health statistics, health education, health policy and management, and environmental/occupational health.

Requirements for Graduation

Courses for both the Master of Public Health Degree program and the Master of Science in Public Health degree program are divided into three principal categories:

- Core courses required for all students
- Courses required for each public health concentration/specialty area
- Elective courses

The number of credit hours of coursework and other program completion requirements are the same for all Master of Public Health concentrations. The basic requirements for each concentration include:

Master of Public Health

<table>
<thead>
<tr>
<th>Degree Requirement</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health core courses (four courses)</td>
<td>12</td>
</tr>
<tr>
<td>Required courses for concentration (courses vary by concentration area)</td>
<td>12</td>
</tr>
<tr>
<td>Elective courses pertinent to the concentration</td>
<td>9</td>
</tr>
<tr>
<td>Master's project</td>
<td>3</td>
</tr>
<tr>
<td>Final comprehensive examination (covering all course work)</td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours to meet Master of Public Health Degree requirements:

1. For students with requisite prior public health experience/education | 36 |
2. New entrants to the field of public health must add a required supervision field experience of 12 hours. | 48 |

Since the Master of Science in Public Health degree involves study that is more research oriented than for the Master of Public Health degree, more extensive credit hours and course requirements are established for the Master of Science in Public Health degree. The basic requirements for each Master of Science in Public Health concentration include:
Master of Science in Public Health

Degree Requirement 

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Public health core courses (the same four courses as for the MPH degree)</td>
<td>12</td>
</tr>
<tr>
<td>Required courses for concentration (courses vary by concentration area)</td>
<td>15</td>
</tr>
<tr>
<td>Elective courses pertinent to the concentration</td>
<td>10</td>
</tr>
<tr>
<td>Master’s research project and thesis</td>
<td>9</td>
</tr>
<tr>
<td>Final comprehensive examination (covering all course work)</td>
<td>4</td>
</tr>
<tr>
<td>Total credit hours to meet Master of Science in Public Health degree requirements</td>
<td>46</td>
</tr>
</tbody>
</table>

1. For students with requisite prior public health experience/education |

2. New entrants to the field of public health must add a required supervised field experience of 12 hours |

58

Further information on the College of Public Health, including courses presently offered and available specialty concentrations, can be obtained by writing or calling: Admissions Committee, College of Public Health, University of South Florida, MHC 6-238, 13301 North 30th Street, Tampa, Florida 33612.

Required Courses for the MPH degree:

(General courses) 

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>HSC 6160</td>
</tr>
<tr>
<td>HSC 6412</td>
</tr>
<tr>
<td>HSC 6436</td>
</tr>
<tr>
<td>HSC 6920</td>
</tr>
</tbody>
</table>

(Special project) 

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 6977</td>
</tr>
</tbody>
</table>

In addition to the Core Courses and Special Project the following courses are required for concentration areas:

- **Health Education**
  - HES 6125
  - HES 6725
  - HES 6255
  - Research Methods

- **Epidemiology and Health Statistics**
  - HSC 6413
  - PCB 6456C
  - PHC 6560
  - Research Methods in Epidemiology (to be developed)

- **Health Policy and Management**
  - ECP 6536
  - HSC 6175
  - PHC 6101
  - PHC 6150

- **Environmental and Occupation Health**
  - ENV 5007
  - HSC 6431
  - HSC 6435
  - HSC 6455
  - HSC 6575
  - PHC 6310
  - PHC 6425

Students will be advised which of the above courses would be applicable to sub areas relating to Safety Engineers, Environmental Health Officers and Sanitarians, Industrial Hygienists and Occupational Physicians.
The social and behavioral sciences are concerned with human beings and their development, problems, behavior, and institutions. The study of man helps the student to understand the world of which he/she is a part, to become a more informed citizen, and to prepare for a role in contemporary society. The social and behavioral sciences provide the student with knowledge, experience, and background for future application in business and industry, government, human service professions, and graduate education.

The setting of the University in the rapidly expanding Tampa Bay metropolitan area provides exceptional opportunities for the development of urban related academic programs, research and community service. By the authorization of the Board of Regents, a Program for Emphasis in Human Services was established at USF for the enhancement of selected programs in the College of Social and Behavioral Sciences and the College of Nursing.

Three programs in the college — Urban Community Psychology, Gerontology, and Urban Anthropology — were approved several years ago by the Board of Regents as Programs of Distinction. Although the programs are housed respectively in the Departments of Psychology, Gerontology, and Anthropology, they utilize faculty expertise from many disciplines. Students majoring in these areas receive distinctive educational experiences in both university and community settings.

The Human Resources Institute of the College of Social and Behavioral Sciences was established to address critical issues in the broad human resources sector through a comprehensive program of research and service. The following Centers are related to the Human Resources Institute: Center for Applied Anthropology, Center for Applied Gerontology, Center for Community Development and Analysis, Center for Community Psychology, Center for Evaluation Research, and the International Center for the Study of Violence.

The International Exchange Center of Gerontology, a service and research institute, was established at the University of South Florida in 1982. Reporting to the President, the Center utilizes the expertise of faculty in the College’s Department of Gerontology. IEGC offers unique opportunities for communication and cooperation between academic institutions and policy-makers to meet challenges facing the elderly.

**BACCALAUREATE LEVEL DEGREE PROGRAMS**

**Admission to the College**

Admission to the College of Social and Behavioral Sciences is open to students who have been accepted to the University of South Florida and who declare a major in a particular field within the college. The Bachelor of Social Work, however, is a limited access degree program and does require satisfaction of additional criteria prior to admission.

Undergraduate students must submit a formal application for admission to the college. This usually occurs during Orientation and Advising for New Students. This application is also available in the College Office of Advising and Student Records for continuing students. Following admission to the College, students will then be counseled by an academic adviser in his/her major field. Information about majors, departments, programs, advising, and other services of the college may be obtained from the Assistant Dean, College of Social and Behavioral Sciences, University of South Florida, Tampa, Florida 33620.

Any student in the University may take courses in the College of Social and Behavioral Sciences. Students in other colleges or adults in the community may select social and behavioral science courses of particular interest.

**Honors Programs**

Faculty and selected students in the college participate in the University Honors Program. In addition, the College of Social and Behavioral Sciences offers undergraduate honors programs in two fields: Political Science and Psychology. Students interested in one of these honors programs should consult the appropriate department for further information.

**General Requirements for Degrees**

The College of Social and Behavioral Sciences currently offers three undergraduate degrees: Bachelor of Arts, Bachelor of Science and Bachelor of Social Work. Requirements for graduation (referred to on page 35) are summarized as follows:

1. **120 credits with at least a “C” average (2.0) in courses taken at the University of South Florida. At least 60 of these credits must be from baccalaureate degree granting institutions. At least 40 of these 120 credits must be in courses numbered 3000 or above. (A minimum of two credits of physical education courses may be counted toward graduation requirements; no credits in physical education are required.)**

2. **40 credits of general distribution courses are required by the University in the areas of English Composition, Fine Arts and Humanities, Mathematics and Quantitative Methods, Natural Sciences, and Social and Behavioral Sciences. (See General Distribution Requirements, page 35.) Transfer students with standard AA degrees will be considered to have met the University’s General Education Requirements; however, such students who have not gained exposure to each of the five areas are strongly encouraged to make up deficiencies early in their USF careers.**

3. **12 credits of courses requiring written assignments of 6000 words; 6 credits of college level math. (Transfer students with AA degrees from Florida public institutions will be considered to have met this requirement.) These courses may be used to satisfy General Distribution Requirements.**

4. **Completion of a major in a subject or an integrated major, with at least a “C” average (2.0), or 2.75 in the case of Social Work majors. (See following pages for requirements in specific majors offered in the college.)**

5. **80 credits outside the major.**

6. **Credits transferred from other institutions will not be included in the computation of the grade point average for graduation. To be eligible for graduation with honors requires at least 3.5 average in all USF work and all previous college work.**

7. **A student must complete at least 30 of the last 60 credits in academic residence at USF. The approval of the Dean of the college granting the degree must be secured for any transfer credits offered for any part of the last 60 hours.**

8. **Satisfactory completion of the College Level Academic Skills Test, and the writing and computation course requirements of 6A-10.30. Students are encouraged to consult regularly with an academic adviser in his/her major. It must be noted, however, that the student assumes full responsibility for satisfying all University, College, and departmental requirements for graduation.**

Students must apply for graduation by the deadline at the beginning of their last term of residence at USF. Students who receive permission to complete requirements for the B.A., B.S. or B.S.W. as transient students should apply for graduation the term after all coursework has been completed.

**Advice To Freshmen and Lower Level Transfers**

Working with an adviser, plan a schedule each semester of 12 to 18 credits. Each term until you’re accepted into upper division take:
1. At least one course with writing assignments of 6000 or more words until you have completed 12 credits of such courses. Start with ENC 1101 and 1104 unless you have received CLEP credit for English.

2. A college level math course (if you are eligible following math testing) until you have completed 6 credits, or a natural science course (suggestions: BSC 2933, CHM 1015, PHY 2038, GLY 2850, GLY 3006, OCE 3001, any AST) until you have completed 6 credits. Six credits in each area are required for graduation.

3. One course in the Social Sciences designed for freshman and sophomores. These courses have prefixes of AFA, AMH, EAH, GEA, MAF, POS, SSI, and WST, and are at the 1000 or 2000 levels.


5. An elective outside the College of Social and Behavioral Sciences. You are most likely to find appropriate courses in the Colleges of Arts and Letters, Fine Arts, and Natural Sciences. At least 6 of these credits should be in the humanities, unless you have chosen humanities courses to fulfill item 1 above.

Programs Leading to the Baccalaureate Degree

The College of Social and Behavioral Sciences offers a major in 13 fields as described in the following pages. In addition to the departmental majors, interdisciplinary majors are offered. (See Interdisciplinary Social Sciences, International Studies, and Social Science Education listed below.

Economics offers two majors, one in the College of Social and Behavioral Sciences and the other in the College of Business Administration.

A Bachelor of Arts Degree is offered in the following:
- Anthropology (ANT)
- Criminal Justice (CCJ)
- Economics (ECN)
- Geography (GPHY)
- Gerontology (GEY)
- History (HTY)
- Interdisciplinary Social Sciences (SSI)
- International Studies (INT)
- Political Science (POL)
- Psychology (PSY)
- Sociology (SOC)
- Social Science Education (SSE)*

A Bachelor of Science Degree is also offered.
- Gerontology (GEY)
- A Bachelor of Social Work Degree (B.S.W.) is also offered.
- Social Work (SOK)

*Offered jointly with the College of Education.

GRADUATE LEVEL DEGREE PROGRAMS

Master's Degree Programs

Graduate level courses are now offered in most social and behavioral science areas. The Master of Arts Degree is offered in the following:
- Anthropology (ANT)
- Criminal Justice (CCJ)
- Geography (GPHY)
- Gerontology (GEY)
- History (HTY)
- Political Science (POL)
- Psychology (PSY)
- Rehabilitation Counseling (REH)
- Post-Baccalaureate
- Rehabilitation Counseling (REF)

5-year program
- Sociology (SOC)

A Master of Public Administration Degree (M.P.A.) is also offered.
- Public Administration (PAD)

A Master of Social Work (M.S.W.) is also offered.
- Social Work (SOK)

In addition to the Master of Arts degree offered from the College of Social and Behavioral Sciences, joint degrees are offered with the College of Education in Social Science Education, School Psychology, and the Junior College Teacher's Program.

The Department of Communicology in the college offers a Master of Science Degree in the following:
- Audiology (AUD)
- Post-Baccalaureate
- Audiology (AUF)
- 5-year program
- Aural (Re) Habilitation (ARH)
- Post-Baccalaureate
- Aural (Re) Habilitation (ARF)
- 5-year program
- Speech Pathology (SPP)
- Post-Baccalaureate
- Speech Pathology (SPF)
- 5-year program

Doctor of Philosophy

The Doctor of Philosophy degree is offered in the following:
- Anthropology (ANT)
- Psychology (PSY)

SPECIAL NON-DEGREE PROGRAMS

The OFF-CAMPUS TERM PROGRAM offers a wide variety of opportunities for self-designed, supervised educational experiences for credit. This program is presently housed administratively in the Department of Interdisciplinary Social Sciences, and the courses are listed under Off-Campus Term and Social Sciences Interdisciplinary.

The WOMEN'S STUDIES PROGRAM consists of courses designed to deal with historical, anthropological, sociological, and psychological aspects of the woman's role and of the female experience. This program is presently housed in the Department of Interdisciplinary Social Sciences, and the courses are listed under Women's Studies.

The Human Services Courses are designed for students interested in careers in the human sciences and services, and may be taken in conjunction with any major or by special students. These courses are coordinated by the Department of Gerontology, and the courses are listed as:

- HUS 3001
- HUS 4020
- HUS 4700
- HUS 5505
- HUS 3502
- HUS 4100
- HUS 5325
- SOW 4332

Certificate of Interpretation

For The Deaf

The College of Social and Behavioral Sciences offers a Certificate in Interpretation for the Deaf for students who want to facilitate the communicative needs of the deaf in our complex society. The certificate program incorporates academic training with practica designed to provide the student with interpreting experiences in a variety of situations. Students seeking this certificate must meet the admission requirements of the University and possess as a minimum the sign language proficiency equivalent of a Level II score on the Quality Assurance Examination for Sign Language. Information and advice about the certificate program may be obtained from the Interpreter Training Program Coordinator in the Department of Communicology. The program is open to students in all colleges.

The certificate program consists of the following courses:

- SPA 2001 (2)
- SPA 4040 (3)
- SPA 4363 (4)
- SPA 4930-001 (3)
- SPA 4334 (2)
- SPA 4930-002 (3)

Approval by the Coordinator of the Interpreter Training Program must be obtained prior to enrollment in this certificate training program. When the student has completed the above requirements, the Coordinator of the Interpreter Training Program will recommend the student for the certificate.
Certificate in Latin American Studies

The College of Social and Behavioral Sciences offers a Certificate in Latin American Studies for students who wish to gain an intensive multidisciplinary understanding of this important area.

A minimum of 24 semester hours is required of all students seeking such a certificate. Of these, at least 16 must be planned around the following core courses:

- **GEA 3400** Geogrophy of Latin America
- **LH 3022** Modern Latin America
- **CPO 4930** Comparative Government and Politics
- **SPT 3131** Spanish American Literature in Translation; or equivalent in original Language.

The remaining 8 hours must be selected from other specified courses with Latin American content, a list of which is available from the Latin American Studies Coordinator.

In addition, students seeking a Certificate in Latin American Studies must have ability in Spanish, Portuguese, or another major Indo-American language or must have completed no less than two semesters of study in that language, or its equivalent. It is hoped that the student will develop an even higher level of competency in one language and at least a minimum proficiency in a second language.

When the student has completed the above requirements, the Latin American Studies Coordinator will recommend the student for the Certificate, which will be awarded upon the successful completion of all degree requirements for the major.

Information and advice about the certificate program may be obtained from the Latin American Coordinator or the Assistant Dean. Only degree-seeking undergraduate students may earn a Certificate in Latin American Studies. The program is open to all majors in all colleges.

### Academic Minor Programs

In order to help students develop some concentration in elective work taken in conjunction with their chosen major, the College of Social and Behavioral Sciences offers minors in the following fields: African Studies, Afro-American Studies, Anthropology, Economics, Geography, History, Human Services, International Studies, Manual Communications, Political Science, Psychology, Sociology, and Women's Studies. (See following pages for requirements in specific minors offered in the college.) There are certain restrictions that apply to students earning a minor in the College of Social and Behavioral Sciences: (1) students who major and minor in the College of Social and Behavioral Sciences may not use courses in the major for the minor or for general distribution requirements; (2) only degree-seeking students may earn a minor in the social and behavioral sciences; and (3) SSI majors may not earn a minor in any of the social and behavioral sciences incorporated in their contracts. Minors will be certified at the time of graduation.

### PROGRAMS AND CURRICULA

#### AFRICAN AND AFRO-AMERICAN STUDIES (AFA)

The African and Afro-American Studies Program offers a quality undergraduate education leading to a Bachelor of Arts degree in African and Afro-American Studies. Essentially it is a service program which provides opportunities for all students to broaden the bases of their knowledge of the entire human experience and intercultural understanding so essential to living in a multi-racial society and a world that has become a global village. It provides a new horizon in liberal education that seeks reunification of the knowledge of human experience and strikes at the narrowness and ethnocentrism of the traditional disciplines which tended to contribute much to race prejudice and misunderstanding.

In the interest of general education the program provides a basic and broad knowledge about Africa and peoples of African descent from prehistoric times to the turbulent present. Part of its mission is to assist its black student clientele to achieve a more dignifying identity and fuller participations in the mainstream of American life. It attempts to help them to develop a greater awareness of themselves and their talents and to provide them with educational and research opportunities necessary for the acquisition and understanding of political and economic realities and tools that must enable black people and other minorities to become effective determinants of their own political and economic life.

Admission to the African and Afro-American Studies major is open to all students who have been duly admitted to the University of South Florida by the Office of Admissions and who file necessary papers in the Office of the Coordinator of Advising, College of Social and Behavioral Sciences, to declare a major in the field. All of the program's courses are open to all other students — regular and special — of the University.

#### Requirements for the B.A. Degree:

The major in African and Afro-American Studies consists of a minimum of 36 hours in the field specified as follows:

<table>
<thead>
<tr>
<th><strong>Required Core Courses</strong> (15 cr. hrs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFA 2001 (3)</td>
</tr>
<tr>
<td>AFA 3100 (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Required Supporting Core Courses</strong> (6 cr. hrs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFA 4150 (3)</td>
</tr>
<tr>
<td>AFA 3311 (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Suggested Elective Courses</strong> (15 cr. hrs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFA 4331 (3)</td>
</tr>
<tr>
<td>AFA 4321 (3)</td>
</tr>
<tr>
<td>AFA 4700 (2-3)</td>
</tr>
<tr>
<td>HUM 3420 (3)</td>
</tr>
<tr>
<td>CPO 4204 (3)</td>
</tr>
</tbody>
</table>

Majors must maintain a minimum of 2.0 average and are also responsible for fulfilling College and University general education requirements.

#### Requirements for the Minor:

African and Afro-American Studies Program offers minors in African and Afro-American Studies to meet the interest of students. Each minor comprises eighteen (18) hours, exactly one-half of the upper division credits required for a major. Requirements for the minors are as follows:

<table>
<thead>
<tr>
<th><strong>African and Afro-American Studies Option I</strong> (Minimum of 18 hours): <strong>Required Core Courses</strong> (9 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFA 2001 (3)</td>
</tr>
<tr>
<td>either: AFA 3100 (3) or AFA 3200 (3)</td>
</tr>
<tr>
<td>Electives (9 hours) selected from:</td>
</tr>
<tr>
<td>AFA 4150 (3)</td>
</tr>
<tr>
<td>AFA 4931 (1-3)</td>
</tr>
<tr>
<td>AFA 3311 (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>African and Afro-American Studies Option II</strong> (Minimum of 18 hours): <strong>Required Core Courses</strong> (9 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFA 2001 (3)</td>
</tr>
<tr>
<td>Electives (9 hours) selected from:</td>
</tr>
<tr>
<td>AFA 4150 (3)</td>
</tr>
<tr>
<td>AFA 4331 (3)</td>
</tr>
<tr>
<td>AFA 4931 (1-3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>**African Studies (Minimum of 18 hours): <strong>Required Core Courses</strong> (9 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFA 3100 (3)</td>
</tr>
<tr>
<td>AFA 3200 (3)</td>
</tr>
<tr>
<td>Electives (9 hours) selected from:</td>
</tr>
<tr>
<td>AFA 4150 (3)</td>
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<tr>
<td>AFA 4931 (1-3)</td>
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<tr>
<td>AFA 3311 (3)</td>
</tr>
</tbody>
</table>

#### ANTHROPOLOGY (ANT)

Anthropology aims at comprehending people as biological and social beings. It is concerned with all forms of people through time and space. One consequence of this broad-ranging view is the presence within anthropology of four branches: physical anthropology, archaeology, cultural anthropology, and linguistics. Exposure to anthropological information and the cross-cultural perspective produces heightened sensitivity in the student to the world about him/her. This helps the student to adopt an intellectual posture of disciplined skepticism with respect to any scheme which purports to define and account for regularities in human life. In response to an increasing interest on the part of students, an undergraduate focus in applied anthropology has been created to offer the Department's majors the option of including career training as part of their anthropology...
curriculum. The focus includes emphasis in applied anthropology coursework and a practicum course in which the student applies anthropological method and theory in off-campus settings. Students majoring in other fields may find anthropology coursework an exciting and valuable supplement to their primary academic interest. A minor in anthropology has been developed with this purpose in mind. The minor program is structured to allow the student maximum flexibility in course selection within a broadly defined progression of anthropological concerns. Thus, the student is able to tailor a minor in anthropology to best suit special wants and needs in the context of an overall curriculum.

The M.A. program, initiated in 1974, was the first in the USA to focus on career training for the practice of applied anthropology. The student pursues major studies in one of three tracks: applied urban and medical anthropology and public archeology (cultural resources management). In addition to core seminars in each of the four major branches of anthropology required of all students, each track has its own specialty courses. Each student performs a full-time internship for one semester during which he/she works on a problem mutually defined and negotiated by the student, a faculty advisor, and a professional supervisor from the agency in which the internship is conducted. By 1985 over 75 graduates had been specifically trained for nonacademic employment in governmental and private-sector agencies and organizations. Graduates are employed in administration, program evaluation, planning and research.

The Ph.D. in Applied Anthropology is the first such program in the USA. It's primary goal is to train students for nonacademic employment in governmental and private-sector agencies, and organizations. Graduates are employed in administration, program evaluation, planning and research.

The Ph.D. in Applied Anthropology is the first such program in the USA. It's primary goal is to train students for nonacademic employment in governmental and private-sector agencies, and organizations. Graduates are employed in administration, program evaluation, planning and research.

Requirements for the B.A. Degree in Anthropology (ANT)

The major in Anthropology consists of a minimum of 33 credit hours. ANT 2000 is prerequisite to all subsequent courses. ANT 3100, ANT 3410, ANT 3511 and ANT 3610 are prerequisite to nonacademic training in the major subdivisions of the field, and ANT 4034 and ANT 4935 complete the specific requirements. Majors are required to complete a minimum of 12 hours of elective coursework, 9 hours of which must come from three of the following four division clusters. ANT 3511 counts in Area IV (Natural Sciences) of the General Distribution Requirements, for non-majors.

Cluster I (Archaeology)

ANT 4133 (3) ANT 4172 (3) ANT 4124 (4)
ANT 4153 (3) ANT 4181 (4) ANT 4158 (4)
ANT 4162 (3) ANT 4182 (3) ANT 4180 (4)
ANT 4163 (3)

Cluster II (Physical Anthropology)

ANT 4542 (3) ANT 4552 (3) ANT 4583 (3)
ANT 4585 (3)

Cluster III (Anthropological Linguistics)

ANT 4620 (3) ANT 4750 (3)

Cluster IV (Cultural Anthropology)

ANT 4226 (3) ANT 4316 (3) ANT 4462 (3)
ANT 4231 (3) ANT 4326 (3) ANT 4495 (3)
ANT 4241 (3) ANT 4340 (3) ANT 4521 (3)
ANT 4302 (3) ANT 4376 (3) ANT 4721 (3)
ANT 4305 (3) ANT 4432 (3) ANT 4723 (3)
ANT 4312 (3) ANT 4442 (3)

The remaining 3 minimum elective hours may come from any of the department's elective offerings, including ANT 4901 (1-4), ANT 4907 (2-4), ANT 4930 (3), and those in the clusters described above. Anthropology majors are urged to become competent readers and speakers of a relevant foreign language, to acquire communicative and quantitative skills appropriate to their interests, and to achieve at least a minimal level of computer literacy. Exceptions to course prerequisites require the consent of the instructor.

Required Core Courses (21 cr. hrs.)

ANT 2000 (3) ANT 3511 (3) ANT 4034 (3)
ANT 3100 (3) ANT 3610 (3) ANT 4935 (3)
ANT 3410 (3)

Requirements for the Minor in Anthropology

The minor in Anthropology consists of a minimum of 18 credit hours with a "C" average (2.0), distributed among three areas. Students will normally progress through these areas in the order listed below, selecting courses prerequisite or otherwise appropriate to courses desired in subsequent areas. Exceptions to this pattern must be approved by the department's undergraduate adviser. Students are urged to consult with the major and minor student advisers to create the most beneficial specific set of courses.

A. 2000-level required core course (3 cr. hrs.)
ANT 2000 (3)

B. 3000-level subfield courses (3-6 cr. hrs.)
ANT 3100 (3) ANT 3511 (3)
ANT 3410 (3) ANT 3610 (3)

C. 4000-level elective courses (9-12 cr. hrs.) (as described in Clusters I, II, III, and IV above)

Requirements for the Undergraduate Focus in Applied Anthropology

This sequence is designed for Anthropology majors who wish to include career training as part of their Anthropology curriculum. The student is required to complete the major in Anthropology, making certain to take the following Focus courses:

ANT 4495 (3) ANT 4442 (3)
ANT 4705 (3) or ANT 4462 (3)

In addition, the student must take ANT 4907 (3), the setting in which the off-campus practicum is pursued. A departmental Letter of Achievement is awarded upon graduation and successful completion of Focus requirements with a "B" average (3.0). Information regarding admission into the Focus program may be obtained from the department undergraduate adviser.

Requirements for the M.A. Degree

General requirements for graduate work are given on page 51 and should be studied carefully. The student must complete 35 semester hours of graduate course work. All students must complete the four core seminar courses; a methods course; and a selected topic course in one of the three tracks (medical anthropology, urban anthropology, public archeology). In addition, each student must complete a graduate-level statistics course, for a minimum of three semester hours; two graduate-level elective courses (normally taken outside the department) for a minimum of five semester hours, chosen in mutual agreement by the student and his/her adviser; successfully pass the comprehensive examination; undertake directed research (internship); and write a thesis. Students in the public archeology track must complete a minimum of six credit hours of regional problems coursework in the track. Medical anthropology and urban anthropology track students must complete a course in contemporary applied anthropology and a regional problems course in the relevant track. The student must maintain a "B" average in all core seminars.

I. Courses Required of All Students

A. Core courses
ANT 6186 (2) ANT 6588 (2)
ANT 6490 (2) ANT 6676 (2)

B. Additional Requirements
Two graduate-level courses normally taken outside the department; one graduate-level statistics course.

C. ANT 6915 (4) ANT 6971 (2)

II. Additional requirements for students in the Public Archaeology Track

ANT 6196 (3) ANT 6198 (6) ANT 6197 (3)
Requirements for the Ph.D. Degree

A requirement for admission into the Ph.D. program in Applied Anthropology is a master's degree in Anthropology or a related discipline. All students must meet USF Graduate School requirements, as indicated on page 56.

Typically, a student will meet the tools of research requirements with:
- a quantitative/computer skills; and
- a substantive external specialization.

The quantitative/computer requirement may be met by satisfactory completion of courses (minimally two) determined by the student's supervisory committee; the substantive external specialization by graduate-level courses (minimally three) outside the department, in an elective area related to applied anthropology, determined by the student's supervisory committee.

Other minimal requirements include:
1. Eight structured courses within the department, including ANT 7703, 7704, 7760 (two separate offerings, one must be Advanced Quantitative Methods), ANT 7932, 7933, 7934, and 7936.
2. A two semester full-time internship (ANT 7945) for a minimum of six credit hours each semester.
3. An orally defended doctoral dissertation normally based upon some aspect of the internship. The department requires six credit hours of dissertation (ANT 7980).
4. Typically, sixty hours beyond the master's degree.

III. Additional course requirements for students in the Medical Anthropology or Urban Anthropology Track

A. ANT 6706 (3) ANT 6766 (3)
B. Either:
  - MEDICAL ANTHROPOLOGY
    ANT 6463 (3) ANT 6769 (3)
  or
  - URBAN ANTHROPOLOGY
    ANT 6447 (3) ANT 6448 (3)

Requirements for the Combined Undergraduate/Graduate M.S. Degree in Speech-Language Pathology—Post-Baccalaureate (SPP)

A minimum total of 150 credits is required for the combined undergraduate/graduate M.S. program. In addition to the General Distribution requirements, degree programs will be planned from among the following courses in order to meet the preparation requirements of the American Speech-Language-Hearing Association for the Certificate of Clinical Competence.

General requirements for graduate work are delineated by the University's Graduate School. A minimum of 30 credits is required as well as completion of sufficient coursework and practicum to meet the American Speech-Language-Hearing Association’s requirement for clinical certification in speech-language pathology. The attainment of clinical competency as determined by a minimum GPA of 3.0 in Graduate Practicum and the approval of a majority of the academic staff of the Department of Communicology is also required for graduation. The student with an existing bachelor's degree and appropriate prerequisites may plan his/her degree program from among the following courses with approval of the department chairperson or his/her delegate:

SPA 4250 (3) SPA 5255 (3) SPA 5256 (3)
SPA 4255 (3) SPA 5257 (3) SPA 5258 (3)
SPA 4336 (3) SPA 5600 (3) SPA 5605 (3)
SPA 4336 (3) SPA 6106 (3) SPA 6553 (3)
SPA 5380 (3) SPA 6231 (3) SPA 6825 (3)
SPA 5201 (3) SPA 6245 (3) SPA 6906 (var.)
SPA 5210 (3) SPA 6322 (4) SPA 6930 (3)
SPA 5222 (3) SPA 6381 (4) SPA 6910 (var.)
SPA 5303 (3) SPA 3384 (4) SPA 6971 (var.)
SPA 5402 (3) SPA 6401 (3) SPA 6971 (var.)
SPA 5550 (4) SPA 6410 (3) SPA 6971 (var.)

Requirements for the M.S. Degree in Speech-Language Pathology—Post-Baccalaureate (SPP)

The attainment of clinical competence as determined by a minimum GPA of 3.0 in Graduate Practicum and the approval of a majority of the academic staff of the Department of Communicology is also required for graduation.

Requirements for the M.S. Degree in Audiology—Post Baccalaureate (AUD)

The attainment of clinical competence as determined by a minimum GPA of 3.0 in Graduate Practicum and the approval of a majority of the academic staff of the Department of Communicology is also required for graduation.

Requirements for the Baccalaureate (AUD)

The attainment of clinical competence as determined by a minimum GPA of 3.0 in Graduate Practicum and the approval of a majority of the academic staff of the Department of Communicology is also required for graduation.

Requirements for the Combined Undergraduate/Graduate M.S. Degree in Speech-Language Pathology—Post-Baccalaureate (SPP)

A minimum total of 150 credits is required for the combined undergraduate/graduate M.S. program. In addition to the General Distribution requirements, degree programs will be planned from among the following courses in order to meet the preparation requirements of the American Speech-Language-Hearing Association for the Certificate of Clinical Competence.

General requirements for graduate work are delineated by the University's Graduate School. A minimum of 30 credits is required as well as completion of sufficient coursework and practicum to meet the American Speech-Language-Hearing Association’s requirement for clinical certification in speech-language pathology. The attainment of clinical competency as determined by a minimum GPA of 3.0 in Graduate Practicum and the approval of a majority of the academic staff of the Department of Communicology is also required for graduation. The student with an existing bachelor's degree and appropriate prerequisites may plan his/her degree program from among the following courses with approval of the department chairperson or his/her delegate:

SPA 4336 (4) SPA 5388 (3) SPA 6402 (3)
SPA 4363 (2) SPA 5402 (3) SPA 6505 (1-8)
SPA 4363 (4) SPA 5557 (1-8) SPA 6825 (3)
SPA 4336 (4) SPA 6305 (3) SPA 6906 (var.)
SPA 5132 (4) SPA 6322 (4) SPA 6930 (3)
SPA 5303 (4) SPA 6381 (4) SPA 6910 (var.)
SPA 5312 (4) SPA 6345 (3) SPA 6971 (var.)
SPA 5380 (1) SPA 6354 (3) SPA 6971 (var.)
SPA 5384 (4)
Requirements for the Combined Undergraduate/Graduate M.S. Degree in Audiology (AUF)

A minimum of 150 credits is required for the combined program. In addition to the General Distribution requirements, degree programs are planned from among the following courses in order to meet the preparation requirements of the American Speech-Language-Hearing Association for the Certificate of Clinical Competence in Audiology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
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<td>SPA 5132</td>
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<td>SPA 6345</td>
<td>(3)</td>
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<td>SPA 5303</td>
<td>(4)</td>
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<tr>
<td>SPA 4050</td>
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<tr>
<td>SPA 4333</td>
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<tr>
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<td>(4)</td>
<td>SPA 6381</td>
<td>(4)</td>
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</tbody>
</table>

The attainment of clinical competence as determined by a minimum GPA of 3.0 in Graduate Practicum and the approval of a majority of the academic staff of the Department of Communicology is also required for graduation.

Requirements for the M.S. Degree in Aural (Re)Habilitation—Post Baccalaureate (ARH)

General requirements for graduate work are already delineated by the University's Graduate School. A minimum of 30 credits is required as well as sufficient coursework, practicum and internship to meet the Florida State Department of Education certification requirements for specialization with the hearing impaired. The attainment of clinical competence as determined by a minimum GPA of 3.0 in Graduate Practicum and the approval of a majority of the academic staff of the Department of Communicology is also required for graduation. Students may plan programs with emphasis in the areas of preschool, school age, multiply handicapped, and adult hearing impaired. All teachers of the deaf programs will be planned from among the following courses in order to meet the preparation requirements of the Department of Communicology as well as from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
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<td>SPA 5388</td>
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<td>SPA 6423</td>
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<tr>
<td>SPA 4336</td>
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<td>SPA 5557</td>
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<td>SPA 6505</td>
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<td>SPA 4363</td>
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<td>SPA 6971</td>
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<tr>
<td>SPA 5380</td>
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</table>

Requirements for the Combined Undergraduate/Graduate M.S. Degree in Aural (Re)Habilitation (ARF)

A minimum of 150 credits is required for the combined programs as well as sufficient coursework, practicum and internship to meet the Florida State Department of Education certification requirements for specialization with the hearing impaired. The attainment of clinical competence as determined by a minimum GPA of 3.0 in Graduate Practicum and the approval of a majority of the academic staff of the Department of Communicology is also required for graduation. Students may plan programs with emphasis in the areas of preschool, school age, multiply handicapped, and adult hearing impaired. In addition to the General Distribution requirements all teachers of the deaf programs will be planned to include coursework from the appropriate teacher preparation areas within the College of Education as well as from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
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<td>(3)</td>
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<td>SPA 6305</td>
<td>(3)</td>
<td>SPA 6930</td>
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<td>(4)</td>
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</tbody>
</table>

Requirements for the Minor in Manual Communications

A minor in Manual Communications is available to undergraduate students interested in attaining an understanding of the communication problems associated with deafness and developing competency in receptive; and expressive manual language skills.

The minor consists of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 4333</td>
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<tr>
<td>SPA 5380</td>
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</tr>
</tbody>
</table>

Departmental approval for the minor must be obtained prior to enrolling in any of the required courses.

CRIMINAL JUSTICE (CCJ)

The major in criminal justice provides students with an indepth exposure to the total criminal justice system including law enforcement, detention, the judiciary, corrections, and probation and parole. The program concentrates on achieving balance in the above aspects of the system from the perspective of the criminal justice professional, the offender, and society.

The objective of the graduate program in criminal justice is to develop a sound educational basis for professional training in one or more of the specialized areas comprising the modern urban Criminal Justice System.

Requirements for the B.A. Degree:

A minimum of 39+ semester hours is required of all undergraduate majors in Criminal Justice including the following courses or their equivalents:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ 3020</td>
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<td>CCJ 3280</td>
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<td>CCJ 3620</td>
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<td>CCJ 4110</td>
<td>(3)</td>
</tr>
</tbody>
</table>

In addition to the above, a minimum of 15 hours in Criminal Justice must be selected by the student to complete the requirements.

Transfer students should be aware that by University regulation they are obligated to establish academic residency by completing the equivalent of one academic year (30 semester hours) in “on-campus” courses. All undergraduate transfer students electing Criminal Justice as their major will be required, moreover, to take a minimum of 27 credits in major coursework at the University of South Florida.

These residence requirements are designed to ensure that transfer students who subsequently receive their baccalaureate degree from the University of South Florida with a major in Criminal Justice will have been exposed to the same body of knowledge in their major as those students who complete all or a major portion of their coursework at the University of South Florida.

Any student who receives a grade of “D” or lower in more than one USF CCJ course will be automatically barred from continuing as a Criminal Justice major.

Requirements for the M.A. Degree

The Department of Criminal Justice offers work leading to the M.A. degree in three main areas of specialization: Urban Law Enforcement Administration, Community Corrections, and Planning and Evaluation. Additional courses of study can be tailored to suit individual student needs.

In addition to meeting all regular requirements of the University (see page 51); each graduate applicant must submit three letters of recommendation and a letter of intent to the Department. Further, said applicant must show successful completion of an acceptable undergraduate social science statistics course (CCJ 4700 or the equivalent).

NOTE 1: Individuals who wish to take courses in the graduate program “Special Students” must contact the Director of Graduate Studies for the Department prior to their first class appearance. Such students will in general be prohibited from enrolling in CCJ 6910.

NOTE 2: All course work counted toward the degree must have the prior approval of the Director of Graduate Studies of the Department of Criminal Justice. Such work may include up to six hours from outside the Department.

The Master of Arts degree is granted upon completion of one of two program options:
THESIS OPTION: 32 semester hours of CCJ course work which include:

- CCJ 6285 (3) CCJ 6709 (3)
- CCJ 6605 (3) CCJ 6920 (2)**
- CCJ 6705 (3)** CCJ 6971 (var.)

In addition, an oral defense of the thesis is required. This will occur after the final draft of the thesis has been accepted by the candidate’s supervisory committee.

AREA PROJECT OPTION: 35 semester hours of CCJ course work which includes:

- CCJ 6285 (3) CCJ 6709 (3)
- CCJ 6605 (3) CCJ 6920 (2)**
- CCJ 6705 (3)** CCJ 6974 (3)

The non-thesis area project option is intended primarily for in-service practitioners who aspire to an administrative position or who are currently holding such a position and who do not intend to continue their graduate education beyond this M.A. degree. Thus, participation in the non-thesis option is only by Department permission.

The project itself will concern one or more specific aspects of the candidate’s chosen area of specialization so that students may apply their graduate studies and skills to practical problems directly related to their own work and agency. Project proposals must be approved by the Director of Graduate Studies and by the student’s supervisory committee. As a matter of course, projects will produce a written product in a format appropriate for explaining and sharing the project’s outcomes.

Further information on any aspect of the degree program may be obtained by writing the Director of Graduate Studies of the Department directly.

**Should be taken during the first semester of the program.

■ ECONOMICS (ECN)

Economics offers a clear, logical way of thinking about complicated business problems as well as contemporary societal issues such as controlling unemployment, inflation, pollution, and crime. The department offers both major and minor programs requiring four courses in basic economic analysis. With elective courses offered in industrial organization, labor economics, international trade, public finance, monetary economics, econometrics, history of economic thought, economic development, comparative economic systems, and other areas, students may tailor their study toward business, teaching, or government service careers. The economics curriculum also provides excellent preparation for those students seeking graduate or professional degrees in social sciences, law, or business.

Requirements for B.A. Degree

A student may earn a Bachelor of Arts degree with a major in Economics by completing satisfactorily 33 credits in Economics in addition to college requirements. These 33 credits include:

- ECO 2013 (3) ECO 4303 (3)
- ECO 2023 (3) GEB 2111 (3)
- ECO 3101 (3) GEB 3121 (3)
- ECO 3203 (3)

Economics majors working at the regional campuses cannot expect to fulfill all Economics course requirements at those regional campuses.

In addition to this core, students are encouraged to select 3000-level courses in several of the applied areas during their junior year. The remaining Economics electives must be selected from those upper level courses that provide the type of program that best suits the student’s interests and objectives. Additional flexibility in pursuing these interests is provided by the ECO 4905 and ECO 4914 courses. However, not more than 6 hours of credit may be earned in ECO 4905 and ECO 4914.

Students majoring in economics are encouraged to supplement their programs with appropriate courses in other social sciences. Political science, psychology, sociology and others contribute greatly to an enriched plan of study. Similarly, a variety of courses in economics are designed to permit students majoring in other disciplines to acquire the skills and insights provided in economics.

Requirements for a Minor in Economics

Students majoring in Social Sciences, as well as students from other colleges, may minor in economics. Total requirements are:

(a) A minor must include these four courses in basic economics:

- ECO 2023 Economic Principles: Microeconomics (3)

(b) In addition, a minor must include two or more upper level courses taught in the Economics Department (excluding the variable credit courses ECO 4905, 4914, and 4935), bringing the total credit hours in economics to a minimum of 18. GEB 3121, Business and Economic Statistics II, or its equivalent, is acceptable for credit in a minor.

(c) Before being recognized as a minor in economics, a student must obtain approval by the advisor in the Economics Department of the courses involved in the student’s minor program.

(d) A grade point average of 2.0 or better must be achieved in the minor coursework for a student to be certified for graduation with a minor in economics.

(e) At least 12 of the required 18 credits must be taken in residence at USF.

■ GEOGRAPHY (GPY)

Requirements for the B.A. Degree:

Geography explains the variable character of the earth’s surface. The two major divisions of geography are physical and cultural (human). Physical geography includes the study of earth-sun relationships, weather, climate, and natural features of the landscape, such as landforms, soils, vegetation, and hydrology. Cultural geography studies people, their various cultures, levels of technology, and economic activities that operate differentially to alter the natural landscape.

Geography’s overriding purpose is to understand the earth as the home of man. A major concern of geography is the wise use of natural, human, and economic resources. Therefore, ecological and environmental considerations are central to the study of geography.

Students are encouraged to take elective credits in a wide variety of disciplines because of the cross-disciplinary approach to geography. Geographers typically work as urban and regional planners, environmental specialists, map and aerial photographic analysts, and resource managers.

A major in geography consists of 36 credit hours as follows:

- Required core courses (12 credit hours):
  - GEO 3013 (4)
  - GEO 3370 (4)
  - GEO 4000C (4)
- One of the following (4 credit hours):
  - GEO 4280C (4)
  - MET 4002 (4)
  - MET 4010 (4)
- Two of the following (8 credit hours):
  - GEO 3402 (4)
  - GEO 4440 (4)
  - GEO 4470 (4)
  - GEO 4342 (4)
  - GEO 4460 (4)
  - GEO 4500 (4)
- One course with a GEA prefix (4 credit hours).
- Any additional 8 credit hours in geography, excluding:
  - GEO 3901
  - GEO 4900
  - GEO 4910

Requirements for the Minor:

A minor in Geography consists of sixteen hours, with a minimum grade point average of 2.0. The required courses are:

- GEO 3000 (6)
- GEO 3013 (4)
- GEO 3370 (4)

One upper level elective (GEA, MET, or URP 3000-5000 level) (4).

Requirements for the M.A. Degree:

General requirements for graduate work are given on page 50. All students must complete 30 credit hours in graduate geography courses, following one of the two plans outlined below. A written and oral comprehensive examination covering the general field of geography is required before graduation, and the student must demonstrate his ability to translate into English the pertinent scientific literature from one modern foreign language. Foreign students, whose mother tongue is not English, may use English as their foreign language. A computer language (such as Fortran) may be used to meet the language requirements.

** Thesis Program:** The 30 credit hours in geography must include:

- GEO 6195
- GEO 6209C
- GEO 6248
- GEO 6319
- GEO 6370
- GEO 6397
- GEO 6495
- GEO 6056
- GEO 6209C
- GEO 6428
- GEO 6495
- GEO 6571

Up to six credits outside the department may be elected with the approval of the student’s committee and major professor. An oral defense of thesis is required.
Minor in Human Services

An undergraduate minor in Human Services is available for students interested in pursuing careers in fields such as social welfare, health care and mental health care, rehabilitation, and corrections. This minor may be taken in conjunction with any undergraduate major but it should be particularly beneficial to persons who are majoring in such disciplines as anthropology, criminal justice, nursing, political science, psychology, social work, and sociology. The Human Services courses are closely related to the Urban Community Psychology and Gerontology Program of Distinction and will be taught by qualified faculty from the various disciplines within the College of Social and Behavioral Sciences. The Human Services minor is coordinated by the Department of Gerontology. Requirements for the minor are a total of 15 hours of the following upper-level courses:

- HUS 3001
- HUS 3502
- HUS 4020
- HUS 4100
- HUS 4700
- HUS 5325
- HUS 5505

Center for Applied Gerontology

The Center for Applied Gerontology is one of five specialized centers in the Human Resources Institute within the College of Social and Behavioral Sciences. The activities of the Center include research on aging, program evaluation, short-term training of agency personnel and other activities intended to complement the educational programs in gerontology.

Graduate Program

The Department of Gerontology offers the degree of Master of Arts in Gerontology with either a thesis or non-thesis option. The primary goal of the non-thesis Master’s Program is to prepare graduates for leadership positions in the planning, development, management, delivery, and evaluation of community services for older persons. The thesis option is primarily for those students who, in addition to acquiring the kinds of knowledge and skills noted above, wish to pursue a doctoral degree at this or another University or who are interested in a research career in aging. Thus, students who wish to work directly or indirectly with older persons upon graduation and who do not anticipate seeking doctoral level training or a research career in aging should consider the non-thesis option while those who are planning additional graduate work or have a strong interest in research should consider the thesis option.

Requirements for the M.A. Degree in Gerontology

The M.A. degree requires four semesters of full-time study—or the part-time equivalent thereof—including one semester of supervised field placement for those choosing the non-thesis option or the completion of a thesis for those electing the thesis option. The courses in the degree program were developed specifically to meet the objectives of the program and are offered under the Department of Gerontology. The M.A. degree in Gerontology requires a minimum of 38 semester hours in approved courses. Prior to beginning the program, each student will confer with a departmental advisor who will thoroughly review the student’s academic background, experience, and career interests and develop an approved, individual curriculum from the available gerontology courses. Required courses for the M.A. degree include:

- GEY 5620
- GEY 5630
- GEY 6325
- GEY 6550
- GEY 6450
- GEY 6455

(*Required for thesis option, only.)

Non-thesis majors are also required to take a minimum of 8 hours and thesis majors a minimum of 5 hours from the following:

- GEY 5642
- GEY 5645
- GEY 6933
- GEY 6934

There are no language requirements. However, following completion of the necessary course work, there will be a comprehensive examination designed to test the student’s knowledge of and ability to integrate key concepts and information in the field of gerontology. This examination must be taken and passed before the student begins the required field placement or the required thesis. In addition to the comprehensive examination, which must be passed by all students in the M.A. program, students electing the thesis option must successfully pass an oral examination on the thesis.

Admission Requirements: To be eligible for admission to the M.A. Program, the applicant must:

1. have a baccalaureate degree or its equivalent from an accredited college or university.
2. have a minimum score of 1000 on the Graduate Record Examination (total of quantitative and verbal aptitude scores) plus a min-
• HISTORY (HTY)

Requirements for the B.A. Degree:

A minimum of 32 semester hours is required for a major in history. Twelve hours of 2000-level courses, or their equivalent, constitute the lower level requirements. At least 12 hours of course work must be drawn from the 3000-4000 level. HIS 4152 and 4936 constitute the upper level requirements for the degree. With the prior written consent of the student's adviser, majors may take up to six (6) hours of course work offered by other departments and programs toward meeting the course requirements in history. The course work undertaken outside the Department of History must complement the student's program in history.

It is recommended that history majors take ENC 3310, "Advanced Expository Writing," SPC 2023, "Fundamentals of Speech Communication," LIS 2001, "Use of the Library," and additional hours drawn from the following disciplines: Afro-American Studies, American Studies, Anthropology, Economics, Geography, Political Science, Interdisciplinary Social Sciences, Psychology, Philosophy, Sociology, Literature, the Humanities, and the Fine Arts. Majors intending to pursue graduate work should take a minimum of two years of classical or modern foreign language.

Requirements for the Minor:

The Department of History offers two options for students interested in the minor in History. Option one requires four history courses (at least 15 hours) at the 3000 and 4000 level drawn from a minimum of three of the following fields: a) Ancient; b) Medieval; c) Modern European; d) United States; e) Non-Western; Latin American, Asian, African. Option two entails a 15-hour program organized and contracted by the student and the department around the specific needs of the student's major program. In both plans, a minimum of 8 hours must be completed at the University of South Florida and the student must maintain a 2.0 GPA in the minor.

INTERDISCIPLINARY SOCIAL SCIENCES (SSI/INT)

The Department of Interdisciplinary Social Sciences offers two academic majors: the College major (Interdisciplinary Social Sciences), administered by the Assistant Dean in the college, and the major in International Studies, major administered by the Department of Anthropology, Economics, Geography, Political Science, Interdisciplinary Social Sciences, Psychology, Philosophy, Sociology, Literature, the Humanities, and the Fine Arts. Majors intending to pursue graduate work should take a minimum of two years of classical or modern foreign language.

Requirements for the B.A. Degree:

The college major offers students whose educational and vocational interests and objectives cross disciplinary lines an opportunity to undertake a program of study individually designed to serve those interests and objectives. That program of study must include 42 credits in courses offered in the college including STA 3122, Social Science Statistics and a minimum of six credits in Interdisciplinary Social Science courses. At least 28 or the 42 hours required must be upper level.

Within these parameters each student's program of study is to be evolved in consultation with and must be formally approved by the major adviser, who is the Assistant Dean. The program of study must include the area of concentration of at least 15 credits in one discipline; it will normally be expected to include a second area of concentration with either a disciplinary or multidisciplinary focus. The choice of areas of concentration and of courses within them is to be directly related to the educational goals of the student such as to provide an educational experience of excellent quality.

Students choosing the SSI major may opt for a contract emphasizing one of the following interdisciplinary fields: Human Services, Urban Studies, Women's Studies or Women's Studies and Human Services. The SSI major with emphasis in Human Services is designed around 2 core areas, one either in Anthropology, Psychology, or Sociology, and a second in Gerontology or Human Service courses. The Urban Studies emphasis is designed around the core areas of Geography and Political Science, and a cluster of urban-related courses in other social sciences. Students opting for either emphasis focusing around Women's Studies should consult with the Director of the Women's Studies Program in selecting courses to fulfill the contract, subject to final approval of the Assistant Dean. Each of these interdisciplinary options could lead to graduate study in fields such as Gerontology, Rehabilitation Counseling, Applied Anthropology, Urban and Regional Planning, Criminal Justice, and Social Work.
International Studies (INT)

Requirements for the B.A. Degree:
The major in International Studies is designed to enable students to undertake programs of study which will emphasize (a) preparation for careers in international activities, or (b) the study of particular international themes or topics, or (c) the study of particular regions or cultures.

The program of study is developed by each student in consultation with the major adviser so as to best serve the individual's educational goals. The program is to include not less than 34 semester hours.

At least 18 of these hours (six courses) must be in the International Studies Program offerings of the Department of Interdisciplinary Social Sciences.

The six courses required are:

- SSI 3221 (3)
- SSI 3260 (3)
- SSI 4250 (3)
- SSI 4936 (3)

and 2 courses of 3 hours each chosen from upper level offerings of the department.

The additional 16 hours may be selected from course offerings of other departments, which are approved by the major adviser as having adequate international, regional or cultural content.

With the approval of the major adviser, credits earned in:

- SSI 4900 (1-3)
- SSI 4935 (1-6)
- SSI 4910 (1-3)

may be used to augment or substitute for the foregoing requirements.

Required Supporting Courses

One year (or equivalent proficiency) of appropriate foreign language.

Students will be provided with advice as to choices of other courses offered throughout the University which will best reinforce and complement their major program. Each student's program must be planned with the international studies adviser who is empowered to make appropriate substitutions when educationally justified.

Minor in International Studies

The minor in International Studies is basically a name given to a set of International Studies courses taken by a student that approximates one half of the upper division level credits required for a major. The minor consists of 18 credit hours made up of six courses as follows:

- SSI 3221 (3)
- SSI 3260 (3)
- SSI 4250 (3)

and 3 upper level courses chosen from the International Studies Program's offerings of the Department of Interdisciplinary Social Sciences.

Each student's program must be planned with the International Studies Program major adviser, who is empowered to approve appropriate substitutions when educationally justified.

Interdisciplinary Core Courses

These courses, taught from an interdisciplinary social science perspective, focus on contemporary social problems and issues. Included is Social Science Statistics which is required for majors in Interdisciplinary Social Sciences, Anthropology, Nursing and Sociology.

Off-Campus Term

The Off-Campus Term Program, described more in detail elsewhere in this Catalog, is a University-wide, interdisciplinary program which urges students to spend part of their time in college in pursuits that are self-designed and implemented in an environment entirely off-campus out of the classroom. OCT provides for an "education in life" for full academic credit as an alternative to the traditional methods of learning.

Women's Studies Program

The Women's Studies Program offers a wide variety of courses from an interdisciplinary perspective based on the best and most current scholarship on women. Its subject is not only the evolution of historical attitudes and practices concerning women but an analysis of the present status and condition of many classes and groups of women as well. The content of the program is designed to apply to study in many disciplines. Several courses are crosslisted with those of other departments, and may be taken for major credit in either Women's Studies or in the joint-listed department.

B.A. in SSI with an Emphasis in Women's Studies or Women's Studies and Human Services

Within the college major, (SSI), students may emphasize Women's Studies, or Women's Studies and Human Services. The program of study is to be developed by each student in consultation with the Director of Women's Studies in order to best serve the individual's educational aims. The B.A. in SSI with an emphasis in Women's Studies or Women's Studies and Human Services consists of 42 credit hours, including STA 3122 and core courses in Women's Studies.

The contract for an SSI major with an emphasis in Women's Studies is designed to provide a well-rounded liberal arts education based on the new knowledge about women in many disciplines. Such training could also serve as a pre-professional degree, e.g., as background for application to law school, for graduate study in Social Work or Rehabilitation Counseling, or for study in specific disciplines in which students wish to focus their research on women.

The SSI major with an emphasis in Women's Studies and Human Services is appropriate for those who wish to work in the helping professions and whose training would benefit from a close scrutiny of some of the major issues and problems faced by women today. This B.A. could serve as a pre-professional degree for students who wish to work in political science in a variety of fields, e.g., Urban or Medical Anthropology, Criminal Justice, Gerontology, Public Administration, Counselor Education.

Minor in Women's Studies

A student wishing to minor in Women's Studies will be required to take five courses:

- WST 2010 or WST 2011 (Introduction to Women's Studies I or II)
- Two Women's Studies courses at the 3000 level.
- Two Women's Studies courses at the 4000 level, no more than three of which may be satisfied by WST 4900 (Directed Readings) or 4910 (Directed Research).

Students interested in minoring in Women's Studies must be certified by the Program Director.

POLITICAL SCIENCE (POL)

Requirements for the B.A. Degree

The undergraduate program leading to the B.A. degree in political science offers a general purpose degree, and a number of more specialized alternatives. These include the pre-professional plan in political science. The program is designed for students interested in and seeking to understand political problems and issues, and the nature of the political process, as well as the philosophical and legal basis of political structures and processes at local, state, national, and international levels. Satisfying the degree requirements prepares students for positions in the public and private sectors, for law school, for graduate work in political science, international relations, public administration, and related disciplines, for positions in education, and for applied political activity.

A minimum of 38 credit hours is required to satisfy the requirements of the major. Students must take the seven credit hours which make up the core curriculum, and in addition, a total of 31 credit hours in political science, of which at least 16 credit hours must be in courses at or above the 4000 level. For instructional purposes, the political science curriculum is divided into seven fields. However, there are no field requirements. Students are free to select courses from any and all fields within the curriculum.

Students transferring credit hours towards a major in political science must complete a minimum of 20 credit hours within the Department, regardless of the number of credits transferred, in order to satisfy the requirements of the major.

The undergraduate curriculum in political science is composed of the following:

Required Core Courses (7 cr. hrs.)

- POS 2041 (3)
- POS 3713 (4)

Electives from the seven fields (31 cr. hrs.)
Field I

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<th>Political Theory</th>
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Field II

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Field III

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Field IV

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<td>POS 2112 (3)</td>
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Field V

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Field VI

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Field VII

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<td>POS 3283 (4)</td>
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<td>POS 3691 (4)</td>
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The following courses are not included within any of the seven fields, but may still be used as elective hours:

| PAD 3003 (4) | POS 4941 (4) |
| PAD 4204 (4) | POS 4970 (4) |
| POS 4905 (1-4) | POS 4910 (1-6) |
| POS 4936 (4) |

Requirements for a Minor in Political Science

A minor in political science consists of a minimum of 18 credit hours, made up of POS 2041 (3 credit hours) and an additional 16 credit hours of courses from the seven subfields in political science: Political Theory, Comparative Government and Politics, International Relations, American National and State Governments, Urban Government and Politics, Public Policy, and Law and Politics. At least 8 credit hours must be in courses at the 4000/5000 level. No more than 4 credit hours can be taken from POS 4910, POS 4941, POS 4970, and POS 4905. A GPA of 2.0 is required. Subject to these limitations, students may take an undergraduate course offered in political science. There are no field or sequence requirements.

Field Work

The Department of Political Science has a field work program which provides students with part-time internships with state and local government and with political parties at the state and local level. Academic credit is available for such internships. For further information, contact the Department of Political Science.

Honors in Political Science

Honors in political science is designed for the outstanding undergraduate who seeks an intensive program plus academic recognition during the senior year. Admission to the honors sequence, which is available to all undergraduate majors, will be controlled by grade point average, personal interviews and close scrutiny of the student's program and record. Students admitted will write an honors thesis, POS 4970 (4).

Pre-professional Plan in Political Science

This plan is designed for students seeking an intensive undergraduate concentration in political science. Typically, students electing this plan will be oriented towards graduate work in political science or other social sciences. A minimum of 39 credit hours is required.

Students must take seven credit hours or required courses:

| POS 2041 (3) |
| POS 3713 (4) |

Eight additional courses in political science (32 cr. hrs.) must be taken, of which at least five must be above the 3000 level. Concentration within fields will be encouraged.

Requirements for the Pre-Law Plan in Political Science

The Department of Political Science offers a pre-law plan designed for the undergraduate considering a career related to law; Field VII of the undergraduate curriculum (Law and Politics). The courses making up the Field are of particular interest to law-oriented students, but may be taken by others as well. The department seeks to guide majors to those courses which develop skills and provide information needed for good performance in the study of law. The department also seeks to give students the skills and information needed for entry into a number of law-related positions in business and government. An integral part of this plan is a high degree of student access to the department's pre-law adviser.

Prior to admission to law school, a student must take the Law School Admission Test (LSAT). This test is given by the Educational Testing Service of Princeton, New Jersey.

The Law School Admission Test is given simultaneously several times each year at the University of South Florida and numerous other testing centers throughout the state. Students should plan to take the test at least one year prior to planned enrollment in law school. Additional information is available from the Department of Political Science, University of South Florida.

(Pre-law is not a prescribed program of study. No specific college major is required for admission to law school. Those students intending to pursue the study of law must obtain a Bachelor of Arts degree in an area of personal choice. It is generally agreed that knowledge and understanding of the political, economic, and social context within which legal problems arise facilitate a career in law.)

International Affairs Focus in Political Science

The Department of Political Science offers a number of courses that prepare students for graduate study in International Relations and career opportunities in private or public transnational organizations.

Basic courses in the area include:

- Introduction to International Relations (INR 3002)
- Introduction to Comparative Politics (CPO 3002)
- American Foreign Policy (INR 3102)

In addition, the Department offers the following upper-level courses:

- Politics of Developing Areas (CPO 4034)
- Comparative Politics of Selected Areas (CPO 4930)
- Defense Policy (INR 4334)
- International Policy Economy (INR 4035)
- International Law (INR 4403)
- International Organizations (INR 4502)
- Issues in Comparative Politics (CPO 5934)
- Issues in International Relations (INR 5086)

Students desiring careers in international affairs or international administration are encouraged to supplement these courses with courses offered in the Departments of International Studies, Management, Economics, Business Administration, and Foreign Languages.

Requirements for the M.A. Degree

The graduate program leading to the M.A. in political science is designed to offer advanced general instruction in political science. It prepares its graduates for positions of responsibility in the public and private sectors as well as in research, teaching, and study at the doctoral level.

General requirements for graduate study are given on page 51. The student must complete a minimum of 34 credit hours of graduate level courses, of which at least 16 hours must be at the 6000 level. A minimum of 20 credit hours must be taken in formal, regularly scheduled classes. Courses at the 5000 level are accepted for credit towards the degree when taken as part of a planned program, with the approval of the student's adviser and the Department of Political Science.

A minimum of 20 credit hours must be taken in political science; eight credit hours of approved electives may be taken outside the department. All graduate students must write a thesis (six credit hours) or petition for substitution with 8 hours of regular courses.

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All students must pass a comprehensive examination in order to satisfy the degree requirements. This examination normally will be given following the completion of thesis. Students who petition for the non-thesis option have been approved will be permitted to take the examination upon successful completion of at least 32 credit hours. Students who do not have an undergraduate major in political science or its equivalent, may be admitted to the program upon the consent of the department. Such students may be asked to take additional courses beyond the minimum requirements. Students must be registered as full-time graduate students for at least one semester of study.

Graduate students in the M.A. program are required to take the graduate core curriculum:

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<td>and POS 6706 (4)</td>
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<td>POS 6157 (4)</td>
<td>URP 5131 (4)</td>
<td>POS 6696 (4)</td>
</tr>
</tbody>
</table>

The following non-field courses may be used as elective hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 6909</td>
<td>1-4</td>
</tr>
<tr>
<td>POS 6919</td>
<td>var.</td>
</tr>
</tbody>
</table>

The Department of Political Science presently has a strong focus in the fields encompassing international affairs. A student can focus in this area choosing from a broad range of regular courses and selected topics classes. Selected topics recently examined have included: Foreign Investment, The Politics of Advanced Industrial States, Soviet Politics, and the Politics of Latin America.

The following courses in the international affairs area are included:

<table>
<thead>
<tr>
<th>Course</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPO 5934</td>
<td>Selected Topics - Comparative Politics</td>
</tr>
<tr>
<td>CPO 6007</td>
<td>Seminar in Comparative Politics</td>
</tr>
<tr>
<td>CPO 6036</td>
<td>Politics of Developing Areas</td>
</tr>
<tr>
<td>INR 5086</td>
<td>Issues in International Relations</td>
</tr>
<tr>
<td>INR 6007</td>
<td>Seminar in International Relations</td>
</tr>
<tr>
<td>INR 6036</td>
<td>Seminar in International Political Economy</td>
</tr>
<tr>
<td>INR 6107</td>
<td>American Foreign Policy</td>
</tr>
</tbody>
</table>

More detailed instructions of specific programmatic requirements may be obtained from the Department of Political Science.

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**PSYCHOLOGY (PSY)**

The undergraduate program in Psychology offers the student a well-rounded Liberal Arts education, together with the opportunity to gain a special acquaintance with issues such as those concerning people's role in modern society, tactics of social change, personal adjustment, and the individual in the workplace. In addition, the program provides excellent background training for qualified students who wish to pursue graduate work in disciplines such as clinical, experimental, or industrial psychology, education, gerontology, counseling, women's studies, black studies, or community relations.

The graduate faculty of the Psychology Department is divided into three broad program areas: Clinical-Community, Experimental, and Industrial-Organizational. Each of these program areas offer Ph.D. level training as well as introductory instruction at the undergraduate level. Members of the graduate Clinical-Community faculty offer coursework and training in the areas of abnormal psychology, developmental psychology, behavioral modification, psychotherapy, personality, psychological assessment, and community psychology. Members of the graduate Experimental faculty provide direct extensive research experience in the areas of comparative psychology, electrophysiology, learning and conditioning, human memory, perception, and information processing. Members of the graduate Industrial-Organizational faculty offer training, and evaluation of employees, job motivation and satisfaction, small group analysis, organizational theory, human factors, organizational change, and evaluation.

**Requirements for the B.A. Degree**

Majors must complete at least 34 semester hours in the field. All majors must complete:

I. **2000/3000 Level Requirement (6 semester hours)**

   Successful completion of: PSY 3013 (3 semester hours) and one of the following:

   - INP 3101
   - PSY 3022
   - SOP 3742
   - PSY 2012

II. **Methods Course Requirement (7 semester hours)**

   Successful completion of: PSY 3213 and one of the following:

   - CLP 4433
   - PSY 4205
   - or another methods course approved by the undergraduate advisor in Psychology.

III. **4000 Level Requirement (21 semester hours)**

   Successful completion of 7 additional courses numbered at the 4000 level selected as follows:

   At least two courses from each of the two groups below:

   - **Group I**
     - EXP 4204C
     - EXP 4304
     - CLP 4143 (4 semester hours) and one of
   - **Group II**
     - EXP 4404
     - EXP 4523C
     - INP 4004
     - SOP 4004
     - DEP 4005
     - PPE 4004

   and 3 additional courses numbered at the 4000 level.

   Note: No more than a total of 3 hours of the following course may count toward the major:

   - PSY 4913 Directed research

   - PSY 4205 (3) is strongly recommended for students planning graduate training. Functional mathematics and biological science courses are recommended. Otherwise, students majoring in psychology are encouraged to complete a varied undergraduate program.

**Requirements for the Minor in Psychology**

A minor in Psychology consists of a minimum of 15 credit hours, comprising PSY 2012, PSY 3013, and any three 4000 level psychology courses except PSY 4913. A GPA of 2.0 or better in the minor is required for certification. The purpose of the minor is to help students majoring in other disciplines to obtain an appropriate psychology background that will complement their work in their major. See the Psychology Department Undergraduate Advisor for suggested minor programs for students majoring in various fields.

**Psychology Honors Program**

The purpose of the Honors Program is to provide a select group of undergraduate Psychology majors an opportunity to undertake an intensive individualized research experience. The culmination of the Honors Program is the completion and defense of an honors thesis. Application for the program will take place during the second semester of the student's junior year, or prior to completion of 90 semester credits. Admission to the program is competitive and based on the student's overall academic record, performance in psychology courses and a letter of recommendation from a member of the Psychology Department faculty. Successful completion of the program requires a GPA of 3.5 in major coursework, an
Requirements for the M.A. Degree:

General requirements for graduate work are given on page 51. The student must complete 30 credit hours of graduate psychology courses. All students are required to complete two of the three quantitative methods courses (PSY 6217A, 6217B, 6217C). In addition, the student must complete the departmental core requirement of six courses (two credit hours each) indicated below:

- DEP 6058 Developmental Psychology
- EXP 6608 Cognitive Psychology
- EXP 6406 Learning
- PPE 6058 Personality
- PSB 6056 Physiological Psychology
- SOP 6059 Social Psychology

A research thesis, PSY 6971, is required and the student must successfully pass an oral examination of the thesis and research courses. The Department of Psychology does not admit students seeking a terminal M.A. degree in Psychology.

In addition to the M.A. degree in Psychology, the Psychology Department and the Department of Educational Psychology in the College of Education jointly grant the M.A. degree in School Psychology (SE). (See College of Education, page 99.)

Requirements for the Ph.D. Degree

The Ph.D. in Psychology is offered in the fields of Clinical/Community, General Experimental and Industrial/Organizational Psychology. Advanced doctoral level requirements are determined by the student and his/her Ph.D. committee.

Assuming that the student has completed an M.A. degree in Psychology or its equivalent, the Psychology Department requires the following in addition to the general University requirements for the Ph.D. degree, on page 56.

1. Department of Psychology graduate minor requirement. The Department of Psychology requires the student to take a Graduate Minor. The Minor meets the language requirement of the Graduate School. A minor program of study, composed of work done outside the student's field of concentration and constituted by a minimum of three appropriate level courses or their equivalent, is required by the Department for admission to Ph.D. candidacy. The Minor must be approved by the student's Ph.D. committee and the Department of Psychology.

2. Supervised undergraduate psychology teaching experience.

3. A one-year internship in an approved clinical facility for Ph.D. students in the Clinical Psychology program.

4. Six months of internship in approved industries or community agencies as available for Ph.D. students in the Industrial/Organizational Psychology program.

PUBLIC ADMINISTRATION (PAD)

The Public Administration Program offers the Master of Public Administration (M.P.A.), which is primarily designed to meet the education and training needs of those students who are presently working or interested in professional careers in the public sector at all levels of government. The program provides training in a variety of practical public management skills and techniques oriented to applications by state or Federal agencies and local governments. General requirements for admission to the graduate program are given on page 51. In addition, the Public Administration Program may require letters of recommendation, provisional admission and/or additional undergraduate courses to provide the student with the background necessary for graduate study in the M.P.A. program.

Requirements for the M.P.A. Degree

Students must complete a minimum of 46 credit hours of graduate level courses, of which at least 24 credit hours must be at the 6000 level. A minimum of 28 credit hours must be taken in formal, regularly-scheduled classes. Courses at the 5000 level may be accepted for credit towards the degree when taken with the consent of a student's adviser.

The plan of study for an M.P.A. student consists of the following course distribution:

1. Eight credit hours of core courses:
   - PAD 6060 (4)
   - and
   - POS 5734 (4)
   or any 5000 or 6000 level course in statistics or Research Methods, with program approval.

2. Twenty credit hours in one of the three substantive areas:

   Area I—National and State Administrative Systems:
   - (Focuses on Public Agencies)
   - PAD 5035 (4) PAD 6037 (4)
   - PAD 5333 (4) PAD 6105 (4)
   - PAD 5417 (4) PAD 6207 (4)
   - PAD 5605 (4) PAD 6907 (1-4)
   - PAD 5612 (4) PAD 6915 (1-6)
   - PAD 5807 (4) PAD 6934 (1-4)
   - PAD 5836 (4)

   Area II—Urban Administration
   - (Focuses on Local Government Management)
   - PAD 5333 (4) PAD 6327 (4)
   - PAD 5417 (4) PAD 6907 (1-4)
   - PAD 5807 (4) PAD 6934 (1-4)
   - PAD 6207 (4) *URP 5131 (4)
   - PAD 6228 (4) *URP 5132 (4)
   - PAD 6306 (4) *URP 6056 (4)

   *Cross-listed with Political Science.

   Area III—Policy Analysis (Focuses on Design Analysis and Evaluation)
   - PAD 5035 (4) PAD 6306 (4)
   - PAD 5333 (4) PAD 6327 (4)
   - PAD 5417 (4) PAD 6907 (1-4)
   - PAD 6037 (4) PAD 6519 (1-6)
   - PAD 6105 (4) PAD 6934 (1-4)
   - PAD 6207 (4)

3. A minimum of twelve credit hours electives in courses designed by the Program.

4. Six credit hours of field work: PAD 6946; or six credit hours of Special Project: PAD 6908.

Students must pass a comprehensive examination in the chosen substantive area. This examination may be oral or written, upon the recommendation of the student's adviser and the consent of the Program. Students may also petition the Program for permission to substitute a thesis in place of the fieldwork requirement, according to procedures established by the Program.

REHABILITATION COUNSELING (REH/REF)

The mission of rehabilitation counseling is to help physically, mentally, and emotionally disabled individuals live full and productive lives. Rehabilitation counselors work in a wide variety of both public and private human service settings. Public employment settings include the various Department of Health and Rehabilitative Services programs, community mental health centers, alcohol and substance abuse treatment centers, hospitals, and rehabilitation facilities. Private sector settings include private-for-profit rehabilitation companies, employee assistance programs, family counseling agencies, and other private counseling practices.

The Department of Rehabilitation Counseling emphasizes training in psychological, social, medical, and vocational aspects of disability. Training in the required core courses is both experiential and didactic, preparing students to function as both personal adjustment counselors and rehabilitation specialists. Students are encouraged to organize elective hours into study concentrations consistent with their professional interests and future career plans.
The Department of Rehabilitation Counseling offers only the M.A. degree. Most students are admitted after earning a baccalaureate degree in one of the behavioral, social, health-related, or educational disciplines (REH). A five-year program (REF) is available for select undergraduates, and undergraduates interested in this program should contact the department during their sophomore or junior year.

The graduate program in rehabilitation counseling is fully accredited by the Council on Rehabilitation Education (CORE), the national accrediting body for rehabilitation counselor training programs. Upon completion of the program, graduates are eligible to sit for the national certification examination of the Commission on Rehabilitation Counselor Certification. After passing this examination, the graduate is registered with the Commission as a Certified Rehabilitation Counselor (CRC). Under the Psychological Services Act graduates are also eligible for state licensure as Mental Health Counselors after two years of supervised work experience.

Requirements for the M.A. Degree:

General requirements for graduate work are listed elsewhere in this catalog.

All students applying to the Department of Rehabilitation Counseling (REH or REF) must take the GRE and have these scores reported and present in their file before the departmental deadline. New students are accepted in Fall and Spring Semesters only. The deadline for applying for admission for Fall Semester is March 30 and for Spring Semester October 15. Three letters of recommendation and a personal interview are also required. All admitted students must show successful completion of an acceptable undergraduate social science introductory statistics course or equivalent, or they must complete such a course during the first semester after acceptance.

Students admitted through the post-baccalaureate program (REH) must have an earned bachelor's degree. Minimum admission requirements include a total Quantitative-Verbal score of at least 1000 on the GRE or a B average during the last two years of undergraduate work or a graduate degree from an accredited institution.

Students admitted through the five-year program (REF) must have completed 90 semester hours of work and all General Distribution requirements. Minimum admission requirements include a total Quantitative-Verbal score of at least 1000 on the GRE or a B average on all work beyond 60 semester hours. Five-year program students may earn a baccalaureate degree in another major under the conditions specified in the Academic Policies section of this catalog.

The Department of Rehabilitation Counseling offers both a thesis and a non-thesis program. There is no language requirement; however, a comprehensive examination involving both written and practical work is required of all students.

The following 44-hour core courses are consistent with national certification standards of rehabilitation counselors and must be taken by all students (post-baccalaureate, five-year, thesis, and non-thesis).

- EGC 5065 (4)
- EGC 5376 (4)
- EGC 5493 (3)
- EGC 5725 (4)

Additional requirements for graduation include:

Non-thesis program: Students in the non-thesis program must complete a minimum of 150 semester hours in the post-baccalaureate program (REH) and 150 semester hours in the five-year program (REF). Electives may be taken from rehabilitation counseling offerings or from offerings outside the department with the consent of the student's adviser.

Thesis program: Students in the thesis program must complete a minimum of 47 semester hours in the post-baccalaureate program (44-hour core courses plus 3 credit hours of EGC 6971), and a total of no less than 150 semester hours in the five-year program (44-hour core courses plus 3 credit hours of EGC 6971). Additional hours to complete the minimum of 150 credit hours for students in the five-year program may be earned in other rehabilitation counseling offerings or from related programs with the consent of the student's adviser. An oral defense of the thesis is required.

Social Work (SOK)

Undergraduate Study

The University of South Florida offers a program leading to a Bachelor of Social Work (B.S.W.) degree in the Department of Social Work, College of Social and Behavioral Sciences. This program has been developed in accordance with the guidelines set forth by the Council on Social Work Education, the national accrediting body for social work education programs, and in accordance with the recommendations of the National Association of Social Workers. The B.S.W. program is fully accredited by the Council on Social Work Education.

The primary objective of the B.S.W. program is the preparation of the graduate for beginning level professional practice as a social work generalist.

The secondary objectives of the B.S.W. program are:
1. to provide for the social work human resources needs of the University service district (the central Florida west coast area), the State of Florida, and the Southeast Region;
2. to prepare graduates for additional professional training at the graduate level in social work or in related human service professions;
3. to provide an exposure to social work as a profession and to contemporary issues in the social welfare field to non-social work majors and others in the community.

In preparing the B.S.W. graduate for beginning professional practice, the curriculum provides the student with an opportunity to develop a knowledge base and skill base as a "generalist" practitioner. The student will develop an understanding of various interventive methods, and skill in the application to a variety of client systems. For example, interventive methods may take the form of individual and group counseling, resource development, consultation, teaching, advocacy, etc. Client systems may be individuals, families, groups, community groups, organizations, social welfare organizations, etc. The student will develop an understanding of the dynamics of human behavior in individual, group and organizational contexts and the influences of the sociocultural environment upon those behaviors. The student will learn about the development of social welfare systems and institutions and the social, economic, and political processes affecting policy development and program implementation. The student will develop an understanding of the utilization of basic social research skills particularly related to the processes of problem-solving, planning, and evaluation.

The student will also become aware of the value base of the profession and engage in a self-examination process as it relates to the development and reflection of ethical and effective professional practice. The B.S.W. program, as any professional program, places great emphasis on the development of a professionally responsible graduate in terms of one's obligations to the client system served, the profession itself, the organization in which one works, and to the general public which ultimately provides any profession with legitimacy.

Enrollment in the B.S.W. program is limited. Unlike many academic programs where the student may declare a major, the B.S.W. program is a limited access program. Students may apply for admission to the program after having satisfied the admission criteria described below. However, the completion of the prerequisites does not guarantee the student's admission to the program. Limited state funding places constraints on the size of the social work faculty and in order to maintain a high quality of instruction it is necessary to achieve an appropriate faculty-student ratio. This means that it may be necessary to deny admission to the B.S.W. program solely on the basis of no available space. Any student filing intent to seek admission or actually applying for admission to the program should be aware of this possibility.

Additionally, any student who does not maintain a GPA of at least 2.75 in social work courses while enrolled in the B.S.W. program or who clearly does not exhibit responsible professional behavior, may be subject to dismissal from the program. A social work major receiving a grade of less than "C" in a core course will be required to repeat the course.

Admission to the B.S.W. program is a two-stage process. Any student that holds a minimum of Sophomore standing may declare a pre-social work major. This is done by filing a declaration of major form with the College of Social and Behavioral Sciences, Records and Advising Office and a similar form with the Department of Social Work. All pre-majors will be assigned to an advisor within the Department who will assist the student in selecting pre-core courses (see listing of pre-core courses.) Many students will have already taken most of the pre-core courses as part of general distribution at USF or in their course of study at a community college. After completing the pre-core courses a student will be ready to apply for admission to the B.S.W. program as a full major. It is necessary to be admitted as a major before taking core social work courses.

Admission requirements for the social work major are as follows:

1. A student must have completed a minimum of one semester as a
Pre-Core Courses
demonstrated.

2. A student must have completed required pre-core courses (see listing).
3. A student must have a minimal grade point average of 2.75 for all U.S.F. work completed.
4. A student must complete an application for admission and file it with the Department of Social Work at the beginning of the Semester in which admission is sought;
5. A student must complete an admission interview with a favorable recommendation from the Admissions Committee;

Any of the foregoing admission criteria may be waived by the Department where unusual circumstances and compelling merit are clearly demonstrated.

Pre-Core Courses

1. A student must complete one course in each of the following cognate areas.
   - Biology
   - Environment
   - Food and Drugs
   - Sex, Reproduction and Population
   - Fundamentals of Biology
   - Economics
   - Contemporary Economic Problems
   - Microeconomics
   - Macroeconomics
   - Political Science
   - American National Government
   - State and Local Government
   - Florida Politics and Government
   - Psychology
   - Introduction to Contemporary Psychology
   - Contemporary Problems in Psychology
   - General Psychology
   - Sociology
   - Introduction to Sociology
   - Contemporary Social Problems
   - Social Psychology
2. A student must complete one of the following cross-cultural courses.
   - African and Afro-American Studies
   - Introduction to Afro-American Studies
   - Social Institutions and the Ghetto
   - Black Americans in the American Economic Process
   - Blacks in American Political Process
   - Anthropology
   - Introduction to Anthropology
   - Anthropological Perspective
   - Cultural Anthropology
   - History
   - Immigration History
   - Sociology
   - Racial and Ethnic Relations
   - Women's Studies
   - Introduction to Women's Studies
   - Contemporary Women in the United States
   - Psychology of Women
   - Women in Cross-Cultural Perspective
3. A student must complete one of the following behavior courses.
   - Human Services
   - The Life Cycle
   - Psychology
   - Developmental Psychology
4. A student must complete SOW 3203, Introduction to Social Welfare and Social Work, with a minimum grade of "B".

Requirements for the B.S.W. Degree (Core Courses)

1. Human Behavior and Social Environment Courses
   - SOW 3101 (3)
   - SOW 3102 (3)
2. Social Welfare Policy & Service Course
   - SOW 4233 (4)
3. Social Research Course
   - SOW 3403 (4)
4. Social Work Practice Courses
   - SOW 4341 (5)
   - SOW 4343 (5)
5. Directed Field Experience
   - SOW 4510 (10)
6. Additional Requirements
   - SOW 4361 (3)

Summary:

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Field Experience</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 hours</td>
<td>10 hours</td>
<td>37 hours</td>
</tr>
</tbody>
</table>

Graduate Study

The University of South Florida offers a program leading to a Master's of Social Work (M.S.W.) degree in the Department of Social Work, College of Social and Behavioral Sciences. This program has been developed in accordance with the guidelines set forth by the Council on Social Work Education, the national accrediting body for social work education programs, and in accordance with the recommendations of the National Association of Social Workers. The MSW program is in candidacy for full accreditation by the Council on Social Work Education.

The primary objective of the MSW program is the preparation of the graduate for professional social work practice through the provision of specialized knowledge and skills necessary for clinical practice with individuals, families and groups. Secondary objectives of the MSW program are: 1) to prepare students academically for pursuit of doctoral education in social work or related human service disciplines or professions; 2) to contribute to the needed supply of professionally trained clinical social workers in the Tampa Bay area, the State, the region and nationally.

The MSW program offers a specialized course of study in direct clinical practice. The program offers students a core curriculum plus electives and a supervised field experience designed to produce practitioners with individual, family and group practice skills. The program will emphasize broad health and mental health concerns and will offer students optional concentrations in the target populations of child/youth and adults/elderly.

The MSW program is designed to produce specific competencies for clinical practice. Graduates of the MSW program can reasonably be expected to: 1) demonstrate practice competency in relationship skills; 2) demonstrate knowledge of the interrelationships in the biological, psychological and sociocultural factors in human life including the impact of disease, injury and emotional distress and their implications for social work practice; 3) demonstrate skill in methods of scientific inquiry for the purpose of advancing professional knowledge and skill; 4) demonstrate basic skill in the application of a range of social work treatment methodologies for the purpose of differential diagnosis and intervention; 5) demonstrate practice competency in applying a psychosocial approach to the assessment of human problems; 6) demonstrate practice competency in applying a psychosocial approach to treatment of human problems through the modes of individual, family and group modalities; 7) demonstrate a basic knowledge of managerial processes in social services, including program planning, personnel management, finance and evaluation. In addition to producing the referenced practice competencies the MSW program places a great emphasis on standards of professional behavior and ethics in the practice of social work. The MSW program is designed to produce a competent and professionally responsible graduate.

Students admitted to the MSW program will be expected to maintain a minimum GPA of 3.0 with no grade below C counting toward graduation. Failure to maintain the specified grade point or to exhibit responsible professional behavior may result in suspension or dismissal from the program.

Students will be admitted to the MSW program once a year with new classes starting Semester I of each academic year (August). The course of study consists of 60 credit hours taken over four semesters. The curriculum is heavily sequenced and students must enroll on a full-time basis in accordance with the published schedule of the Department. Failure to maintain full-time enrollment will result in dismissal from the program. All students will be required to obtain professional liability insurance prior to enrollment in field courses.

Admission requirements for the MSW program are as follows:

1. An applicant must submit completed application form to the
Department of Social Work and to the Graduate Admissions Office by March 1 for admission to the following Fall Semester (GRE scores may be submitted later upon arrangement with the Department);
2. An applicant must have a minimum grade average of 3.0 for the last two years of undergraduate work and/or for any graduate work completed;
3. An applicant must submit current GRE scores;
4. An applicant must have previous social service related experience (minimum of one year post undergraduate work or equivalent);
5. An applicant must provide names of previous supervisors and professors that may serve as references;
6. An applicant must complete a brief written statement on social work practice (to be assigned by the Department);
7. An applicant must participate in an admissions interview with the Admissions Committee (with favorable action).

Requirements for the M.S.W. Degree

A. Human Behavior and Social Environment Courses
   1. SOW 6105 (5)
   2. SOW 6121 (3)
   3. SOW 6126 (2) or SOW 6129 (2)

B. Social Work Practice Courses
   1. SOW 6360 (5)
   2. SOW 6362 (3)
   3. SOW 6368 (3)
   4. SOW 6356 (2) or SOW 6359 (2)
   5. SOW 6375 (3)

C. Policy and Services Course
   1. SOW 6235 (4)

D. Social Work Research Courses
   1. SOW 6404 (3)
   2. SOW 6432 (3)
   3. SOW 6435 (3)

E. Supervised Field Experience
   1. SOW 6534 (4)
   2. SOW 6535 (6)
   3. SOW 6536 (4)

F. Additional Requirements
   1. Electives (7)

Summary

Core Courses 39 hours
Field Experiences 14 hours
Electives 7 hours
Total 60 Hours

SOCIOCY (SOC)

Sociology offers both a major and a minor.

As an undergraduate major, sociology provides students with three different kinds of program concentrations. One, attractive to the majority of possible students, may be described as “useful sociology.” Many of the courses taken involve skills valuable in employment. For example, in a research methods course, interviewing skills can be used in sales, personnel work, social action careers, management, as well as in research. Similarly, careers which involve inter-personal relations can benefit enormously from courses in social psychology or small group analysis. Also professional training, as in law school, business administration, social work, and the like, can rest on courses that have “useful” aspects in them. Another concentration can be styled of "liberal education." In this concentration, the central point is the question of the nature of man, the social being. Experience has shown that the truly liberally educated person is prepared for a variety of life experiences because that person understands how to ask important questions and how to go about getting answers. More importantly, the liberally educated person is equipped to take seriously the matter of being a human being. Sociology courses are aimed largely at problems on the nature of one's social world, the nature of man collectively, and on the individual person—the student as a unique being. Finally, sociology can be a major in the sense that it represents an intellectual discipline. Some students will find that it is interesting in its own right and that they would like to continue educational pursuits beyond the bachelor’s degree.

These different concentrations differ as much in the attitude of the student taking the courses as in the selection of courses making up the individual program of study. They are not logically distinct concentrations; any one course may have elements of all three. For example, a student majoring in sociology as an academic discipline may at the same time involve himself in questions of a liberal education and at the same time pick up skills which will lead to satisfying employment. Students should understand that sociology majors are not restricted to social work or even social action types of careers.

Careers for which a major in sociology seems appropriate, judging from those who have so majored and succeeded in their fields, cover a wide range of lines utilizing interpersonal relations. Law, for example, is well predicated on sociology. So are personnel related careers, as in counseling. Similarly, knowledge of social relations, social structure, and class differences appear valuable to the entire spectrum of sales opportunities. Generally speaking, any career dealing with the public in a direct or indirect way will benefit from training in sociology. The benefits derive either from the knowledge gained or the skills (as in interviewing, a fundamental aspect of any formal system of people interacting with each other), or both. Specific elective courses should reflect individual differences and the student's departmental major adviser will assist each one in making particular choices.

As an undergraduate minor, Sociology serves as a convenient body of knowledge and experience for a variety of disciplines. For the major in Mass Communications, for example, a Sociology minor would give some substance to stories and insights to backgrounds of stories thus enabling a reporter better to do an assigned job. Those majoring in Sales would similarly have an understanding of the process of whatever organization they work in or for, as well as a knowledge of the public. Similarly, students in advertising, politics, religion, counseling, aging studies, criminal justice, and related areas will find a sociological minor of particular value. Finally, those seeking to teach social studies at the high school level will find a minor in Sociology compatible with their interests.

Requirements for the Major (B.A. Degree)

The major consists of a minimum of 30 credit hours. The following courses may not be counted in the 30 hour minimum for the major but may be elected as additional courses: SYG 1010, SYG 2412, SYA 3504. No more than 3 credit hours of Individual Research (SYA 4910) may be counted as major elective credit. A model program of recommended sequences may be obtained from the Department of Sociology.

Transfer students should be aware that by University regulations, the equivalent of one academic year must be taken in "on-campus" courses. In Sociology, we require that of the 30 credits needed to make up the major, no more than 9 credits earned elsewhere, including exchange program credits, can count towards the major. The purpose of this rule is to ensure that our certification that an individual who has majored in sociology genuinely reflects our understanding of sociology as a major and that there is no fundamental difference between the transfer student and those whose work was entirely or mostly completed at the University of South Florida.

STA 3122 (3) SYG 2000 (3)
SYA 3010 (3) SYP 3000 (3)
SYA 3300 (3) and either SYO 3530 (3) or SYO 3500 (3)

For students electing a major after having successfully taken 12 upper division credits without having had a formal Introductory course, SYO 3500, Social Organization, may be substituted for SYG 2000 as a requirement. Students making this choice must take SYO 3530 to meet the additional requirement stated above.

Requirements for a Minor

A minor consists of a total of 15 credits; SYG 2000, Introduction to Sociology (or equivalent) plus 12 semester hour credits at the 3000 level or higher. Though we do not require an adviser, feeling students to be capable of making reasonable choices, we recommend the use of an adviser to find the best set of courses fitting one's personal interests.

Requirements for the M.A. Degree:

A minimum of 32 credit hours and a thesis. Required Courses (17 cr. hrs.)

SYA 6126 (3) SYA 6505 (1)
SYA 6305 (3) SYA 6971 (6)
SYA 6405 (4)

University requirements for graduate study are given on page 51. Admission to the M.A. Program: Satisfactory score on the Graduate Record Examination (Aptitude); two letters of reference from previous instructors; four courses in sociology, including statistics, theory, and methods of research (STA 3122, SYA 3010, SYA 3300, or equivalent). Documents are sent to the Office of Admissions. Instructions for applicants are available from the Department of Sociology.
COURSE DESCRIPTIONS

Courses offered for credit by the University of South Florida are listed on the following pages in alphabetical order by college and subject area. The first line of each description includes the State Common Course prefix and number (see below), title of the course, and number of credits.

Credits separated by a colon indicate concurrent lecture and laboratory courses taught as a unit:

**PHY 3040, 3040L GENERAL PHYSICS AND LABORATORY** (3:1)

Credits separated by commas indicate unified courses offered in different semesters:

**AMH 2010, 2020 AMERICAN HISTORY I, II** (4,4)

Credits separated by a hyphen indicate variable credit:

**HUM 4905 DIRECTED RESEARCH** (1-5)

The abbreviation “var.” also indicates variable credit:

**MAT 7912 DIRECTED RESEARCH** (var.)

The following abbreviations are utilized in various course descriptions:

- **GR** See Grades in the Graduate Program heading in the Division of Graduate School; page
- **PR** Prerequisite
- **CI** With the consent of the instructor
- **CC** With the consent of the chairperson of the department or program
- **CR** Corequisite
- **Lec.** Lecture
- **Lab.** Laboratory
- **Dem.** Demonstration
- **Pro.** Problem
- **Dis.** Discussion

The University reserves the right to substitute, not or add courses that are listed in this catalog.

Alphabetical Listing of Departments and Programs

Course descriptions are listed by college under the following department and program headings:

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### Cross-Listing of Departments and Programs

#### Alphabetically by College, Department/Program

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Speech Communication-English Education

College of Engineering
- Basic and Interdisciplinary Engineering
- Chemical and Mechanical Engineering
- Civil Engineering and Mechanics
- Computer Science and Engineering
- Computer Service Courses
- Electrical Engineering
- Engineering Technology
- Industrial and Management Systems Engineering

College of Fine Arts
- Art
- Dance
- Music
- Theatre

College of Medicine
- Medicine
- Medical Sciences

College of Natural Sciences
- Astronomy
- Biology
- Botany Courses
- Microbiology Courses
- Zoology Courses
- Chemistry
- Geology

Marine Science

Mathematics

Medical Technology

College of Nursing
- Nursing

College of Public Health
- Public Health

College of Social and Behavioral Sciences
- African and Afro-American Studies
- Anthropology
- Communicology
- Criminal Justice
- Geography
- Gerontology
- History
- Human Services
- International Studies
- Off-Campus Term
- Political Science
- Psychology
- Rehabilitation Counseling
- Social Sciences
- Social Work
- Sociology
- Women's Studies

Cross-Listing Departments/Programs Alphabetically by Prefix

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**COURSE LEVEL DEFINITION**

<table>
<thead>
<tr>
<th>Level</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>0000-1999</td>
<td>Freshman Level</td>
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<tr>
<td>Level</td>
<td>2000-2999</td>
<td>Sophomore Level</td>
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<tr>
<td>Upper</td>
<td>3000-3999</td>
<td>Junior Level</td>
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<tr>
<td>Level</td>
<td>4000-4999</td>
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<tr>
<td>Graduate</td>
<td>5000-5999</td>
<td>Senior/Graduate Level</td>
</tr>
<tr>
<td>Level</td>
<td>6000-Up</td>
<td>Graduate Level</td>
</tr>
</tbody>
</table>
# UNIVERSITY-WIDE COURSES

## COOPERATIVE EDUCATION

*Director:* G. F. Lentz; *Coordinator:* L. J. Berman, Associate Director: James H. Pettigrew

### UNDERGRADUATE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COE 1940</td>
<td>Cooperative Education, 1st Training Period</td>
<td>(0)</td>
<td>Undergraduate course emphasizing the individual as a manager in an Air Force milieu. The individual motivational and behavioral processes, leadership, communication, and group dynamics are covered to provide a foundation for the development of the junior officer's professional skills as an Air Force officer (officership). The basic managerial processes involving decision-making, utilization of analytic aids in planning, organizing, and controlling in a changing environment are emphasized as necessary professional concepts.</td>
</tr>
<tr>
<td>COE 1941</td>
<td>Cooperative Education, 2nd Training Period</td>
<td>(0)</td>
<td></td>
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<tr>
<td>COE 2942</td>
<td>Cooperative Education, 3rd Training Period</td>
<td>(0)</td>
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<td>COE 2943</td>
<td>Cooperative Education, 4th Training Period</td>
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<td>COE 3944</td>
<td>Cooperative Education, 5th Training Period</td>
<td>(0)</td>
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<td>COE 4946</td>
<td>Cooperative Education, 7th Training Period</td>
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<td>Cooperative Education, 9th Training Period</td>
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<td>Cooperative Education, 10th Training Education</td>
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## AEROSPACE STUDIES


### UNDERGRADUATE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR 1101</td>
<td>The Air Force Today - Organization and Doctrine</td>
<td>(1)</td>
<td>A study of the strategic offensive and defensive forces, general purpose forces, and aerospace support forces that make up the Air Force of today.</td>
</tr>
<tr>
<td>AFR 1120</td>
<td>The Air Force Today - Structure and Roles</td>
<td>(1)</td>
<td>A study of the strategic offensive and defensive forces, general purpose forces, and aerospace support forces that make up the Air Force of today.</td>
</tr>
<tr>
<td>AFR 2001</td>
<td>Air Force ROTC Leadership Laboratory</td>
<td>(0)</td>
<td>The Air Force ROTC Leadership Laboratory is a one hour per week practicum in leadership and management. Leadership Laboratory allows AFROTC cadets to put to use the leadership and management theories they have learned in their AFROTC academic classes. The Leadership Laboratory is based upon an actual Air Force organization and is completely cadet organized, staffed, and managed.</td>
</tr>
</tbody>
</table>

## AFR 2130 U.S. AIR POWER: ASCENSION TO PROMINENCE (1)

A study of air power from balloons and dirigibles through the jet age. Emphasis is on the employment of air power in WWI and WWII and how it affected the evolution of air power concepts and doctrine.

## AFR 2140 U.S. AIR POWER: KEY TO DETERRENCE (1)

A historical review of air power employment in military and non-military operations in support of national objectives. Emphasis is on the period from post WWII to the present.

## AFR 2150 FIELD TRAINING (0)

Field Training is offered during the summer months at selected Air Force bases throughout the United States. Students in the four-year program participate in four weeks of Field Training, usually between their sophomore and junior years. Students applying for entry into the two-year program must successfully complete six weeks of Field Training prior to enrollment in the Professional Officer Course. The major areas of study in the Field Training program include junior officer training, aircraft and aircrew orientation, career orientation, survival training, base functions and Air Force environment, and physical training.

## AFR 3220 AIR FORCE MANAGEMENT AND LEADERSHIP-I (3)

An integrated management course emphasizing the individual as a manager in an Air Force milieu. The individual motivational and behavioral processes, leadership, communication, and group dynamics are covered to provide a foundation for the development of the junior officer's professional skills as an Air Force officer (officership). The basic managerial processes involving decision-making, utilization of analytic aids in planning, organizing, and controlling in a changing environment are emphasized as necessary professional concepts.

## AFR 3231 AIR FORCE MANAGEMENT AND LEADERSHIP-II (3)

A continuation of the study of Air Force advancement and leadership. Concentration is on organizational and personal values, management of forces in change, organizational power, politics, and managerial strategy and tactics are discussed within the context of the military organization. Actual Air Force cases are used to enhance the learning and communication processes.

## AFR 4201 NATIONAL SECURITY FORCES IN CONTEMPORARY AMERICAN SOCIETY - I (3)

A study of the Armed Forces as an integral element of society, with an emphasis on American civil-military relations and context in which U.S. defense policy is formulated and implemented. Special themes include: societal attitudes toward the military and the role of the professional military leader-manager in a democratic society. Students will be expected to prepare critical individual and group presentations for the class, write reports and otherwise participate in group discussions, seminars, and conferences.

## AFR 4211 NATIONAL SECURITY FORCES IN CONTEMPORARY AMERICAN SOCIETY - II (3)

A continuation of the study of the Armed Forces in contemporary American society. Concentration is on the requisites for maintaining adequate national security forces; political, economic, and social constraints on the national defense structure; the impact of technological and international developments on strategic preparedness; the variables involved in the formulation and implementation of national security policy; and military justice and its relationship to civilian law. Students will be expected to prepare individual and group presentations for the class, write reports and otherwise participate in group discussions, seminars, and conferences. Proficiency in communicative skills must be demonstrated.

## AFR 1101L/1120L/2130L/2140L/3220L/3230L/3231L/4201L/4211L LEADERSHIP LABORATORY (0)

Leadership Laboratory is required for each of the Aerospace Studies courses. It meets one hour per week. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. Leadership Laboratory involves a study of Air Force customs and courtesies; drill and ceremonies; career opportunities in the Air Force;
and the life and work of an Air Force junior officer. Students develop their leadership potential in a practical laboratory, which typically includes field trips to Air Force installations throughout the U.S.

HONORS PROGRAM

Director: David Schenck

UNDERGRADUATE COURSES

IDH 2010 ACQUISITION OF KNOWLEDGE

Admission into the Honors Program. An appreciation of the problems of how human understanding proceeds through operations such as perception, classification, and inference, among others, as well as the open philosophic questions behind these operations.

IDH 3100 ARTS/HUMANITIES HONORS

PR: IDH 2010. An introduction to western arts and letters from the perspectives of three “period” terms (classicism, romanticism, and modernism), the relationship of ideas to art, the similarities among the arts of a given period, and important differences between periods.

IDH 3200 BIO-SCIENCES HONORS

An exploration of current knowledge concerning fundamental principles in the Bio-Sciences, their potential for application, and attendant ethical and philosophical questions.

IDH 3300 PHYSICAL SCIENCES HONORS

Introduction to physical entities at the macro, atomic, and subatomic levels. Designed to explore the ways scientists work through an examination of a range of topics.

IDH 3400 SOCIAL AND BEHAVIORAL SCIENCES HONORS

Introduction to the concerns of the Social and Behavioral Sciences Methods of inquiry, discovery, and validation of knowledge. A survey of the way various disciplines examine the question of how society is organized.

IDH 4000 JUNIOR HONORS SEMINAR

A course in problem-solving skills designed to prepare students for independent research. The class will be responsible for determining course content and requirements in close consultation with a faculty mentor.

IDH 4590 HONORS PROJECT

PR: Senior Honors Standing. The development of and public presentation of a special project such as an original musical composition, dramatic piece, etc. under the direction of a mentor.

IDH 4790 HONORS THESIS

PR: Senior Honors Standing. The research for and writing of a senior thesis under the direction of a mentor.

MILITARY SCIENCE

Professor: LTC John LaRoche; Associate Professors: MAJ Dell Dailey, CPT Howard Fields, CPT Charles Imel, CPT Robert Vaughan; Assistant Professors: CPT Nathaniel Hudson, CPT William Paul.

UNDERGRADUATE COURSES

MIS 1020 ORGANIZATION OF THE ARMY AND ROTC

Introduction, purpose, and organization of the Army and ROTC.Introduction to military courtesy, marksmanship, and the role of an Army officer.

MIS 1654 INTENSIFIED COURSE — BASIC SKILLS, TACTICS AND FIELD TRAINING ON CAMPUS

A detailed concept of the U.S. Army’s mission and roles played by newly commissioned officers in accomplishing same. Primarily leadership training incorporating military tactics and techniques, map reading, communications, weaponry.

MIS 2601 MAP READING AND LAND NAVIGATION

PR: MIS 1020 or equivalent, available to non-majors. Study and application of the principles of map reading, military and topographic symbols, terrain appreciation and evaluation, map orientation, intersection and resection, use of the lensatic compass, and an introduction to land navigation.

MIS 2610 MILITARY TRAINING MANAGEMENT AND INSTRUCTION

PR: MIS 2601 or equivalent; available to non-majors. Develops an understanding of the fundamental concepts involved with methods of instruction, training management, and curriculum development in the military. Actual student preparation and presentation will be an integral part of the course.

MIS 2940 BASIC FIELD INTERNSHIP (Ft. Knox)

Basic Field Internship. A summer program conducted at Ft. Knox, KY designed to meet the prerequisites for the Advanced Program under the two year course of study.

MIS 3300 SMALL UNIT OPERATIONS

PR: MIS 2610, 2940, 1654 or equivalent. Open to ROTC Contract Cadets only. Provides training required by junior officer to direct and coordinate individuals and small units in the execution of offensive and defensive tactical missions. Provides exposure to military weapons and communications systems.

MIS 3404 LEADERSHIP FUNDAMENTALS — TACTICS AND CAMP PREPARATION

PR: MIS 3300 or equivalent. Open to ROTC Contract Cadets only. Improves cadet proficiency in those military subjects necessary to meet minimum standards of technical competence and self-confidence required of a junior officer in the U.S. Army. Prepares cadets for participation at Advanced Camp.

MIS 4421C SEMINAR IN LEADERSHIP AND MANAGEMENT

PR: MIS 3404, C1. Obligations and responsibilities of a commissioned officer with emphasis on application of sound leadership to all situations. Uniform Code of Military Justice and its relation to civilian law; Fundamentals of both offensive and defensive tactics and role of various branches of the Army in tactical operations. Role of the U.S. in world affairs in the 1980’s.

COLLEGE OF ARTS & LETTERS

AMERICAN STUDIES

Chairperson: J. B. Moore; Distinguished Professor: R. B. Nye; Professors: D. R. Harkness, J. B. Moore, H. M. Robertson; Assistant Professors: R. A. Banes, R. E. Snyder; Other Faculty: R. C. O’Hara, J. A. Parrish, S. A. Zylstra.

UNDERGRADUATE COURSES

AMS 2363 ISSUES IN AMERICAN CIVILIZATION

Through lecture and demonstration an examination of such topics as natural environment and the quality of life, sports and American society, leisure and technology, vigilante tradition, jazz music, role of the family, American success myth, youth in America. Repeatable up to 6 credit hours.

AMS 3001 AMERICA AT THE TURN OF THE CENTURY

Integration of major aspects of American life between 1898 and 1914. Should be taken the first term a student becomes an American Studies major. Elective for non-majors.

AMS 3201 THE COLONIAL PERIOD

The pattern of American culture as revealed through an examination of selected writings and pertinent slides and recordings dealing with the art, architecture and music of the colonial period. Elective for non-majors.

AMS 3210 REGIONS OF AMERICA

The pattern of American culture as revealed through an examination of
selected writings and other pertinent materials dealing with selected American regions. Elective for non-majors. Repeatable up to eight credit hours.

**AMS 3230 AMERICA DURING THE TWENTIES AND THIRTIES**
Selected interdisciplinary materials are used to examine the relationships among regionalism, nationalism and internationalism during the twenties and thirties. Emphasis is placed on the measure of cultural nationalism attained by the United States during this period. Elective for non-majors.

**AMS 3302 ARCHITECTURE AND THE AMERICAN ENVIRONMENT**
By means of slides, lectures and discussion the course examines 350 years of American architectural history. Architectural styles, aesthetics and the relation between a building and its social environment are stressed.

**AMS 3303 THE AMERICANIZATION OF ENGLISH**
An overview of American attitudes toward the English language from colonization to the present. Among the topics discussed are: the American mania for correctness, the influence of the school marm, place and proper names and language pruridy.

**AMS 3930 SELECTED TOPICS IN AMERICAN STUDIES**
Offerings include The American Success Myth, Cultural Darwinism in America, America Through Foreign Eyes, Contemporary Topics in American Studies, Racism, and Southern Women: Myth and Reality.

**AMS 4910 INDIVIDUAL RESEARCH**
The content of the course will be governed by student demand and instructor's interest. Instructor's approval required prior to registration.

**AMS 4930 SELECTED TOPICS IN AMERICAN STUDIES**
Offerings include American Painting: its social implications, Technology in the Twentieth Century America, American Environmental Problems, Popular Culture in America, American Military Experience, and Labor in America.

**AMS 4935 SENIOR SEMINAR IN AMERICAN STUDIES**
PR Senior in American Studies or CI.

**AMS 4936 SENIOR SEMINAR IN AMERICAN STUDIES**
PR: AMS 4935 or CI.

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**GRADUATE COURSES**

**AMS 6155 THE CORE OF AMERICAN CULTURE**
PR: Graduate standing. Open to non-majors. Representative works (from the arts, sciences, social sciences) reflecting the development of civilization in the U.S. from colonial times to the present. May be repeated up to six (6) credit hours with departmental permission.

**AMS 6254 U.S.A.: A DECADE IN DEPTH**
PR: Graduate standing. Open to non-majors. An example would be The Thirties: Inter-related aspects of American Life from the Stock Market Crash to Pearl Harbor. May be repeated, up to six (6) credit hours.

**AMS 6805 MAJOR IDEAS INFLUENCING AMERICAN CIVILIZATION**
PR: Graduate standing. Open to non-majors. Examination of such concepts as individualism, freedom and liberalism as embodied in literature, politics, religion, architecture, economics, science and technology.

**AMS 6901 DIRECTED READINGS IN AMERICAN STUDIES**
PR: Graduate standing. Open to non-majors. Guided reading designed to expand a student's knowledge in a particular area of interest. May be repeated up to four credit hours.

**AMS 6915 DIRECTED RESEARCH**
PR: GR, Master's level. Repeatable. (S/U only.)

**AMS 6934 SPECIAL TOPICS IN AMERICAN STUDIES**
PR: Graduate standing. Open to non-majors. Variable titles offered periodically on topics of special interest to American Studies students. May be repeated up to four credit hours.

**AMS 6971 THESIS: MASTER'S**
Repeatable. (S/U only.)

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**ANCIENT STUDIES**
See Religious Studies

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**CLASSICS**

**DIRECTED READING (1-4)**

**GRAVY (var.)**

**DIRECTED READING (1-4)**

**GRW 4905 DIRECTED READING**
Departmental approval required.

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**GREEK**

**UNDERGRADUATE COURSES**

**GRE 1100 BEGINNING CLASSICAL GREEK I**
An introductory course in classical Greek grammar with appropriate readings.

**GRE 1101 BEGINNING CLASSICAL GREEK II**
PR: GRE 1100 or equivalent. An introductory course in classical Greek grammar with appropriate readings.

**GRK 3110 BEGINNING MODERN GREEK I**
An intensive study of basic skills; pronunciation, listening comprehension, speaking and some composition.

**GRK 3111 BEGINNING MODERN GREEK II**
PR: GRE 3110 or its equivalent. A continuation of GRE 3110. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.

**GRW 4905 DIRECTED READING**
Departmental approval required.

**GRW 4930 SELECTED TOPICS**
Study of an author, movement, or theme. May be repeated.

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**GRADUATE COURSE**

**GRW 5905 DIRECTED READING**
Departmental approval required.
Latin

UNDERGRADUATE COURSES

LAT 1100 BEGINNING LATIN I (4)
An introductory course in Latin grammar with appropriate readings.

LAT 1101 BEGINNING LATIN II (4)
PR: LAT 1100 or equivalent. An introductory course in Latin grammar with appropriate readings.

LNW 4311 ROMAN COMEDY I: PLAUTUS (4)
PR: Basic knowledge of Latin. Readings of selected plays by Plautus; introduction to comedy—its theory and practice.

LNW 4312 ROMAN COMEDY II: TERENCE (4)
PR: Basic knowledge of Latin. Readings of selected plays by Terence.

LNW 4322 ROMAN ELEGiac POETS II: PROPERTIUS AND TIBULLUS (4)
PR: Basic knowledge of Latin. Readings in Propertius and Tibullus; further study of art and tradition in Roman lyric poetry.

LNW 4361 ROMAN SATIRE I (4)
PR: Basic knowledge of Latin. Readings in the Satyricon of Petronius: Introduction to the nature of satire.

LNW 4362 ROMAN SATIRE II (4)
PR: Basic knowledge of Latin. Readings in Seneca's Apocolocyntosis, the satires of Horace, and Juvenal. Introduction to the tradition and art of formal verse satire.

LNW 4381 LIVY (4)
PR: Basic knowledge of Latin. Readings in the ideas and artistry of this Roman historian.

LNW 4500 CICERO AND ROMAN PHILOSOPHY (4)
PR: Basic knowledge of Latin. Readings in the philosophic writings of Cicero, together with a consideration of eclectic thought.

LNW 4501 SENeca AND ROMAN PHILOSOPHY (4)
PR: Basic knowledge of Latin. Readings in the philosophic writings of Lucius Annaeus Seneca, together with an examination of Stoic, Epicurean, and Eclectic thought.

LNW 4660 ROMAN ELEGiac POETS I: CATULLUS (4)
PR: Basic knowledge of Latin. Readings in Catullus. Study of techniques and tradition in Roman lyric poetry.

LNW 4665 CICERO (4)
PR: Basic knowledge of Latin. Readings in the epistles of Cicero.

LNW 4675 HORACE (4)
PR: Basic knowledge of Latin. Readings in the Odes and Epodes of Horace; study of the Ode's tradition.

LNW 4900 DIRECTED READING (1-4)
Departmental approval required.

LNW 4930 SELECTED TOPICS (4)
Study of an author, movement, or theme.

COMMUNICATION


UNDERGRADUATE COURSES

COM 3003 DIMENSIONS OF COMMUNICATION (3)
An introductory survey of the various perspectives for the study of human communication. An exploration of the assumptions, constructs, and explanatory paradigms associated with the study of communication in its symbolic, aesthetic, historical, critical, and pragmatic dimensions.

COM 3122 INTERVIEW COMMUNICATION (3)
A study of communication theory relative to interview situations with emphasis on the employment interview, appraisal interview, and persuasive interview.

COM 3131 TECHNICAL COMMUNICATION (3)
Investigation and application of methodology and effective technical communication of effective oral presentation of technical reports.

COM 4110 SPEECH COMMUNICATION FOR BUSINESS AND THE PROFESSIONS (3)
Identification of Speech Communication situations specific to business and the professions. Analysis of variables related to communication objectives and preparation of oral presentations in the form of information reports, conference management, persuasive communications, interviews, and public hearing.

COM 4120 INTRODUCTION TO COMMUNICATION THEORY IN ORGANIZATIONS (3)
PR: majors, COM 3003 or CI; non-majors, COM 3122 or COM 4110 or CI. A survey of communication concepts which impact upon organizational effectiveness.

COM 4942 COMMUNICATION INTERNSHIP SEMINAR (3)
PR: Communication major and CI. The Communication Intern Seminar provides students with an opportunity to put into practice concepts and skills acquired in their study of communication. Weekly seminar sessions augment intern experience. Application for seminar must be submitted one semester prior to seminar offering.

ORI 3000 FUNDAMENTALS OF ORAL READING (3)
Designed to develop proficiency in the understanding and oral communication of literary and other written materials.

ORI 3920 ISSUES AND INTERPRETATION (2)
The study of literature through analysis of printed textual materials and of the visual-aural textual performance of them. May be repeated.

ORI 3950 ORAL INTERPRETATION PERFORMANCE (2)
PR: ORI 3000 or CI. The study, rehearsal, and performance of literature for Readers Theatre and Chamber Theatre productions. May be repeated (maximum total four hours).

ORI 4120 ORAL INTERPRETATION OF POETRY (3)
PR: ORI 3000 or CI. Critical appreciation of lyric and narrative poetry and communication of that appreciation to audience. Study of poetic theory and prosodic techniques.

ORI 4140 ORAL INTERPRETATION OF DRAMATIC LITERATURE (3)
PR: ORI 3000 or CI. Critical appreciation and oral interpretation of special textual materials which are inherently dramatic in nature and poetry, narrative prose, drama, biography, and history.

ORI 4230 ORAL INTERPRETATION OF BIBLICAL LITERATURE (3)
PR: ORI 3000 or CI. A critical interpretation and/or presentation of selected Books of the Old Testament.

ORI 4310 GROUP PERFORMANCE OF LITERATURE (3)
PR: ORI 3000 or CI. Designed to introduce the student to and give him experience in various forms of group approaches to oral interpretation.

SPC 2822 FUNDAMENTALS OF SPEECH COMMUNICATION (3)
The nature and basic principles of speech; emphasis on improving speaking and listening skills common to all forms of oral communication through a variety of experience in public discourse.

SPC 2850 SPEECH IMPROVEMENT AND PHONETICS (3)
Design to improve vocal quality and expressiveness, articulation, and pronunciation, and to give instruction and practice in using the International Phonetic Alphabet for speech improvement.

SPC 2852 SPEECH IMPROVEMENT AND PHONETICS II (3)
PR: SPC 2850 or CI. A continuation of SPC 2850. Emphasis will be upon applying listening and transcription skills to the improvement of vocal quality and effective expressions.

SPC 3210 COMMUNICATION THEORY (3)
PR: Junior standing or CI. The study of source, message, and receiver variables in human communications; communication settings; descriptive and predictive models of communication; speech communication as a process.
SPC 3230 RHETORICAL THEORY (3)
This course surveys the foundations and historical evolution of major concepts, issues, theorists, and approaches to the study of rhetoric from Plato to recent contemporary theorists.

SPC 3301 INTERPERSONAL COMMUNICATION (3)
PR: Senior standing or CI. A study of interpersonal communication in informally structured settings with emphasis on the understanding, description, and analysis of human communication.

SPC 3410 PARLIAMENTARY PROCEDURES (2)
Principles of parliamentary procedure and practice in conducting and participating in meetings governed by parliamentary rules.

SPC 3441 GROUP COMMUNICATION (3)
PR: Junior standing or CI. A survey of theory and experimental research in group communication. Group discussions and communication exercises to increase awareness of the dynamics of human communication in small group settings.

SPC 3513 ARGUMENTATION AND DEBATE (3)
PR: Junior standing or CI. Study of principles of argumentation as applied in oral discourse, analysis of evidence and modes of reasoning. Practice in debate preparation and delivery.

SPC 3594 FORENSICS (1)
Study, library research, practice in public speaking situations on campus and in intercollegiate forensic competition. May be repeated (maximum of four hours).

SPC 3601 PUBLIC SPEAKING (3)
PR: SPC 2023 or CI. Study and application of communication strategies in speaking extemporaneously and from manuscript. The course includes study of selected public addresses as aids to increased understanding of speaking skills.

SPC 3633 RHETORIC OF CONFRONTATION (3)
PR: Junior standing or CI. The study of rhetorical strategies and tactics of agitation and control in confrontation situations.

SPC 3641 PROPAGANDA (3)
PR: Junior standing or CI. The study of principles of argumentation as applied in oral discourse, analysis of evidence and modes of reasoning. Practice in debate preparation and delivery.

SPC 3651 CURRENT ISSUES AND RHETORIC (2)
Analysis of significant current speakers and issues. May be repeated.

SPC 3653 POPULAR FORMS OF PUBLIC COMMUNICATION (3)
PR: Junior standing or CI. Analysis of public communication with emphasis on various presentational forms.

SPC 3900 DIRECTED READINGS (1-3)
PR: Junior standing and CI.

SPC 3905 UNDERGRADUATE RESEARCH (1-3)
PR: Junior standing and CI. Individual investigations and faculty supervision.

SPC 3930 SELECTED TOPICS (1-3)
PR: Junior standing and CI.

SPC 4640 THE RHETORIC OF AMERICAN DEMAGOGUES (3)
An analysis of the communication of such 20th Century American political leaders as: Bilbo, Agnew, McCarthy, Wallace, Nixon, and Malcom X.

SPC 4680 HISTORY AND CRITICISM OF PUBLIC ADDRESS (3)
PR: SPC 3601 or CI. The principles of rhetorical criticism applied to selected great speeches of Western Civilization.

SPC 4900 DIRECTED READINGS (1-3)
PR: Senior standing and CI.

SPC 4905 UNDERGRADUATE RESEARCH (1-3)
PR: Senior standing and CI. Individual investigations with faculty supervision.

SPC 4906 INDEPENDENT STUDY (1-3)
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated for credit. (S/U only.)

SPC 4930 SELECTED TOPICS (1-3)
PR: Senior standing and CI.

SPC 4932 SENIOR SEMINAR IN SPEECH COMMUNICATION (3)
PR: Senior standing. Speech Communication major. Exploration of selected topics of current significance to the several areas of speech communication through group discussion and research.

Graduate Courses

COM 5123 COMMUNICATION ASSESSMENT IN ORGANIZATIONS (3)
PR for undergraduates, COM 4120 or CI; graduates, CI. A study of the means by which the communication specialist intervenes in organizational behavior. An emphasis is placed on gathering and analyzing organizational communication data.

COM 6001 INTRODUCTION TO GRADUATE STUDY IN COMMUNICATION (3)
Required of all M.A. candidates. An introduction to the aims and methodologies of the graduate discipline of communication: its relationship to the adjacent arts and sciences; bibliographical resources; methods of research; and a brief survey of the historical development of the field with emphasis upon current issues in theory, research, and practice.

COM 6121 COMMUNICATION THEORY IN ORGANIZATIONS (3)
A study of communication theory and behavior within organization settings: role of communication, communication climates, communication networks, leadership.

COM 6312 EXPERIMENTAL RESEARCH IN ORAL COMMUNICATION (3)
Critical examination of research design, procedures, and reporting of experimental studies in small group communication and persuasive discourse.

COM 6400 COMMUNICATION THEORY (3)
PR: COM 6001. An examination of communication theory through selected reading in the works of major theorists past and present.

LIN 5231 COMMUNICATION SCIENCE: THEORY AND PRACTICUM (3)
PR: SPC 2050 or CI. Intensified instruction in neuroanatomy of oral-nasal cavities, ear, pharyngeal, laryngeal, and thoracic areas. Includes topics in phonological theory such as feature composition and markedness. Practice in IPA and identification of segments through Sona-Graph work.

LIN 5245 EXPERIMENTAL PHONETICS (3)
PR: SPE 2050 or CI. Intensified training in auditory discrimination of the sounds of American English. Detailed use of research findings, instruments, and methodologies in the laboratory study of normal speech. Development of phonetic skills of discrimination and reproduction of speech sounds.

LIN 6233 ADVANCED PHONETICS (3)
PR: LIN 5231 or equivalent. Intensified training in close phonetic transcription. Work on dialects, intonation, distinctive feature theory and acoustic phonetics.

ORI 5145 ORAL INTERPRETATION OF DRAMATIC LITERATURE II (3)
PR: ORI 4140. A study of selected pre-modern dramas with special emphasis on problems of interpretation for oral performance.

ORI 5210 ORAL INTERPRETATION OF CHILDREN'S LITERATURE (3)
PR: ORI 3000 or CI. A study of the theories and practice in the oral interpretation of poetry and narrative fiction for children with special emphasis on classical and modern literature.

ORI 6146 ORAL INTERPRETATION OF THE PLAYS OF SHAKESPEARE (3)
PR: ORI 3000 or CI. A study of selected plays of Shakespeare from the point of view of the oral interpreter.

ORI 6311 COMMUNICATION AESTHETICS (3)
This course examines the historical evolution of the aesthetic dimension of communication as performance in terms of major concepts and theorists from Plato to the present.

ORI 6350 LITERARY ADAPTATION FOR ORAL INTERPRETATION (3)
Composition and adaptation of literary materials for oral presentation. An investigation of approaches to various genres: poetry, fiction, and non-fiction.

ORI 6410 HISTORY AND THEORIES OF ORAL INTERPRETATION (3)
A study of the history, critical writings, uses, and developments of the art of oral interpretation, with analysis of the principles and practices.
ENGLISH


UNDERGRADUATE COURSES

AML 3032 AMERICAN LITERATURE FROM 1860 TO 1912 (4)
A study of representative works of selected American Realists and early Naturalists, among them Whitman, Dickinson, Twain, James, Howells, Crane, Dreiser, Wharton, Robinson.

AML 3033 AMERICAN LITERATURE FROM 1912 TO 1945 (4)
A study of selected American realists, naturalists, and modernists (between WW I and WW II), among them; Whitman, Dickinson, Twain, James, Crane, Dreiser, Faulkner, Williams, Wright, Steinbeck, Stevens, Robinson and Frost.

AML 3271 BLACK LITERATURE (4)
A study of Black American literature from the nineteenth century to the present, including the works of such writers as W. E. B. DuBois, Jean Toomer, Langston Hughes, Richard Wright, Ralph Ellison, LeRoI Jones, and Nikki Giovanni.

AML 3273 AMERICAN INDIAN LITERATURE (4)
A survey of native American Literature from pre-Columbian religious and folk literature to the current voices in the pan-Indian movement.

AML 4101 NINETEENTH-CENTURY AMERICAN NOVEL (4)
A study of the American novel from its beginnings through 1900, including such novelists as Cooper, Hawthorne, Melville, James, Twain, Crane, and Dreiser, among others.

AML 4123 TWENTIETH-CENTURY AMERICAN NOVEL (4)
A study of major trends and influences in American prose fiction from 1900 to the present. Includes works by such writers as Hemingway, London, Fitzgerald, Faulkner, West, Mailer, Bellow, Ellison, Donleavy, Updike, Vonnegut, and others.

AML 4261 LITERATURE OF THE SOUTH (4)
A study of the major writers of the "Southern Renaissance" including writers such as Faulkner, Wolfe, Caldwell, Hellman, McCullers, O'Connor, Warren, Styron, Allen Tate, and Donald Davidson.

AML 4300 MAJOR AMERICAN AUTHORS (4)
The study of two or three related major authors in American literature, focusing on several major figures; the course may include such writers as Melville and Hawthorne, Hemingway and Faulkner, James and Twain, Pound and Eliot, Stevens and Lowell, etc. Specific topics will vary. May be repeated twice for credit with different topics.

CRW 3100 NARRATION AND DESCRIPTION (4)
A study of narrative and descriptive techniques in prose. By making the student sensitive to language usage, it is designed to bridge the gap between expository writing and imaginative writing.

CRW 3110 IMAGINATIVE WRITING: FICTION (4)
PR: CRW 3100. Introduction to the writing of fiction. This course will introduce students to the variety of forms and techniques in the writing of imaginative prose.

CRW 3111 FORM AND TECHNIQUE OF FICTION (4)
PR: CRW 3100. A study of short narrative forms such as the anecdote, tale, character sketch, incident, monologue, epistolary story, and short story as they have been used in the development of fiction and as they exist today.

CRW 3300 FORM AND TECHNIQUE OF POETRY (4)
Study of the basic elements of poetry for reader and writer. Beginning with poetic language and devices used to create forms (haiku, tanka, ballad, song), progressing to basic prosody, rhyme, and stanza pattern, the student is trained in and learns to write many different forms of poetry.

CRW 3311 IMAGINATIVE WRITING: POETRY (4)
Introduction to the writing of poetry. This course introduces the student to a variety of forms and techniques in the writing of poetry.

CRW 4120 WORKSHOP IN FICTION (4)
PR: CRW 3100 and CRW 3111. Study and writing of the short story and sections of the novel. Evaluation of student work in conferences, selected readings. May be taken twice for credit.
### 182 COLLEGE OF ARTS AND LETTERS

**CRW 4320 WORKSHOP IN POETRY** (4)
PR: LIT 3716, CRW 3300, and CRW 3311. Self-expression in traditional and contemporary forms. Student-teacher conferences and classroom discussion, selected readings. May be taken twice for credit.

**ENC 0008 DEVELOPMENTAL ENGLISH** (3)
Instruction and practice in the review of the fundamentals of English. Includes developmental work in English as applied in writing, with emphasis on grammar, punctuation, mechanics of expression and sentence structure. Credit received will not count toward Freshman English credit. Students enrolled will be required to take the full Freshman English sequence upon completing this course. Initial placement in course will be determined by student's score on *Test of Standard Written English.*

**ENC 1101, 1104 FRESHMAN ENGLISH** (3,3)
Instruction and practice in the skills of writing and reading. Courses must be taken in numerical sequence.

**ENC 3011 PRACTICAL GRAMMAR AND USAGE** (3)
Coverage of the traditional forms and practices of English grammar. A study of sentence patterns, sentence structure, agreement, punctuation, pronoun case, and related matters.

**ENC 3210 BASIC TECHNICAL WRITING** (4)
Effective presentation of technical and semi-technical information. May be repeated once for credit.

**ENC 3310 EXPOSITORY WRITING** (4)
A course teaching the techniques for writing effective prose, excluding fiction, in which student essays are extensively critiqued, edited, and discussed in individual sessions with the instructor.

**ENC 4240 TECHNICAL WRITING II** (3)
PR: ENC 3210, or ENC 3310, or GEB 3211, or CI. Technical Writing II is a course designed to develop writing skills of a high order: technical exposition; technical narration, description, and argumentation; graphics; proposals; progress reports; physical research reports; and feasibility reports.

**ENG 3105 MODERN LITERATURE, FILM, AND THE POPULAR ARTS** (4)
A study of particular films and novels that shows us how such popular arts as the detective story, westerns, science fiction, spy stories, and musical comedy have changed; tells us something about why important changes took place; and explores how and why many serious writers and filmmakers today use techniques, ideas and situations drawn from the popular arts.

**ENG 3114 MODERN DRAMA** (4)
A study of such modern and contemporary dramatists as Ibsen, Strindberg, Chekhov, Pirandello, Shaw, O'Neill, Pinter, Stoppard, Brecht, Beckett, and Ionesco.

**ENG 4013 LITERARY CRITICISM** (4)
A study of the works of major literary critics from Aristotle to the present, with emphasis on their meaning, their implied world view, and their significance for our own time and literature.

**ENG 4906 INDIVIDUAL RESEARCH** (1-4)
Directed study in special projects. Special permission of chairperson required.

**ENG 4907 DIRECTED READING** (4)
Readings in special topics.

**ENL 3015 BRITISH LITERATURE TO 1616** (4)
A survey of representative prose, poetry, and drama from its beginnings through the Renaissance, including such poems and figures as Beowulf, Chaucer, Malory, More, Hooker, Skelton, Wyatt, Sidney, Spenser, Shakespeare, Donne, and Johnson.

**ENL 3320 BRITISH LITERATURE 1616-1780** (4)
A survey of 17th Century and Neoclassical Literature, including such figures as Donne, Herbert, Crashaw, Vaughan, Marvell, Milton, Pope, Swift, Johnson, Boswell, and Goldsmith.

**ENL 3520 BRITISH LITERATURE 1780-1900** (4)
The poetry and poetics of the Romantic figures, with attention to the continuing importance of romantic thinking in contemporary affairs and letters; a survey of representative figures of the Victorian and Edwardian periods, including poetry, prose, and drama.

**ENL 3723 BRITISH LITERATURE 1900-1945** (4)
Survey of poetry, drama, and fiction of such writers as Eliot, Yeats, Thomas, Conrad, Shaw, Joyce, Lawrence, Huxley, Woolf, Forster, Waugh, Owen, Auden, O'Casey, among others.

**ENL 3333 SHAKESPEARE I** (4)
A reading of from ten to twelve representative plays with special attention to developing the student's ability to read, visualize, and interpret the text.

**ENL 3334 SHAKESPEARE: TEXTS AND FILMS** (4)
An introduction to the art of William Shakespeare through a comparative analysis of four of his most famous dramas and modern film adaptation of them; *Hamlet, King Lear, Romeo and Juliet and Henry V.*

**ENL 4122 BRITISH NOVEL THROUGH HARDY** (4)
A study of early and later British novels such as Fielding, Smollett, Sterne, Austen, Scott, Dickens, Eliot, and Hardy, among others.

**ENL 4132 BRITISH NOVEL: CONRAD TO THE PRESENT** (4)
A critical study of British fiction from 1900 to the present, with emphasis on such writers as Conrad, Lawrence, Joyce, Woolf, Huxley, Orwell, Burgess, Murdoch, Golding, and others.

**ENL 4171 HISTORY OF BRITISH DRAMA TO 1912** (4)
A study of the history of British Drama from its liturgical origins to the beginning of the twentieth century, exclusive of Shakespeare. Included are the mystery and morality plays, and representative works by Marlowe, Jonson, Middleton, Dryden, Congreve, Sheridan, and Wilde, among others.

**ENL 4303 MAJOR AUTHORS** (4)
The study of two or three related major figures in English, American, or World Literature. The course may include such writers as Fielding and Austen, Keats and Yeats, Joyce and Flaubert, etc. Specific topics will vary. May be taken twice for credit with different topics.

**ENL 4311 CHAUCER** (4)
An intensive study of *The Canterbury Tales* and major critical concerns.

**ENL 4338 SHAKESPEARE II** (3)
PR: ENL 3333 or CI. Intensive study of selected plays of Shakespeare, with special attention to significant critical issues and to the Elizabethan and Jacobean cultural setting.

**ENL 4341 MILTON** (4)
Study of the poetry and major prose of John Milton, with special emphasis on *Paradise Lost.*

**LIN 4100 HISTORY OF THE ENGLISH LANGUAGE** (4)
The evolution of language from Anglo-Saxon through Middle English to Modern English. Development of the English lexicon. Changes in the pronunciation, syntactic, and semantic systems; discussion of the forms which influenced them.

**LIN 4340 TRADITIONAL ENGLISH GRAMMAR** (3)
PR: ENC 3011 or CI. A course primarily using the sentence diagram to present a detailed analysis of the parts of speech, verb tenses, sentence functions, and other basic grammatical classifications of traditional English grammar.

**LIN 4370 STRUCTURE OF AMERICAN ENGLISH** (4)
An introductory survey of traditional, structural, and generative-transformational grammars and their techniques for the analysis and description of linguistic structure in general, and contemporary American English in particular.

**LIT 2000 INTRODUCTION TO LITERATURE** (4)
The nature and significance of literature in its various forms: fiction, drama, poetry; emphasis on the techniques of reading literature for intelligent enjoyment. Will not be counted toward the English major.

**LIT 2021 CURRENT SHORT FICTION** (4)
Traditional and experimental short stories of this generation: such writers as Updike, Malamud, O'Connor, Roth, Barth, Ionesco, and Barthelme. Will not be counted toward the English major.

**LIT 2091 CURRENT NOVELS** (4)
A study of major British and American novels since WW II; attention will be given to the cultural influences and recent literary trends. Will not be counted toward the English major.

**LIT 2092 DRAMA: TEXTS AND FILMS** (4)
A study of the great works of drama, with emphasis on recent forms and themes. Films will demonstrate the possibilities of visualization. Will not be counted toward the English major.
LIT 3022 MODERN SHORT NOVEL (4)
A study of the novella from the nineteenth century to the present. Writers include: James, Dostoevsky, Camus, Styron, Nabokov, Gardner, Roth, Vonnegut, and others.

LIT 3073 CONTEMPORARY LITERATURE (4)
An introduction to the fiction, poetry, and drama written since 1945—American, British, Continental. Focus may be on one, two, or all three genres or on works from any combination of nationalities.

LIT 3101 LITERATURE OF THE WESTERN WORLD THROUGH THE RENAISSANCE (4)
A study in English of the great works of Western Literature from its beginnings through the Renaissance, including the Bible, Homer, Sophocles, Plato, Euripides, Virgil, Cicero, Dante, Petrarch, Machiavelli, and Rabelais, among others.

LIT 3102 LITERATURE OF THE WESTERN WORLD SINCE THE RENAISSANCE (4)
A study in English of the great works of Western Literature from the Neoclassic to the Modern Period, including such writers as Moliere, Racine, Voltaire, Dostoevsky, Chekhov, Ibsen, Kafka, Gide, Sartre, and Camus, among others.

LIT 3144 MODERN EUROPEAN NOVEL (4)
A study of the Modern European novel in translation as it developed from the nineteenth century to the present, including such writers as Dostoevsky, Hofmannsthal, Kafka, Hesse, Camus, and Solzhenitsyn.

LIT 3304 TWENTIETH-CENTURY BEST SELLERS (4)
A study of representative best-selling novels in twentieth century America; including such popular works as Peyton Place, Lady Chatterley's Lover, Exodus, and Catcher in the Rye, which have sold in excess of 5,000,000 copies and have served to portray our changing society and to reveal our changing literary taste.

LIT 3310 FANTASY AND SCIENCE FICTION (4)
A survey of fantasy and science fiction in England from Mary Shelley to the present; includes such writers as Poe, Melville, Ray Bradbury, Arthur C. Clarke, among others.

LIT 3374 THE BIBLE AS LITERATURE (4)
Major emphasis on literary types, literary personalities of the Old and New Testaments, and Biblical archetypes of British and American literary classics.

LIT 3383 THE IMAGE OF WOMEN IN LITERATURE (4)
A survey of feminism, antifeminism, sexual identity, the feminine mystique, stereotyped and liberated female images from Sappho to the present, with special emphasis on women writers and on the emergence of the women's movement. (Also offered under Women's Studies.)

LIT 3410 RELIGIOUS AND EXISTENTIAL THEMES (4)
Theological and philosophical ideas, allusions, and symbols in the writings of Dostoevsky, Nietzsche, Mann, Joyce, Eliot, Camus, Sartre, and others.

LIT 4581 LITERATURE AND THE OCCULT (4)
An introduction to the occult tradition as a major ingredient in English, Continental, and American literature; analysis of the origins, classifications, and areas of the various magic arts from classical times through the present.

LIT 3716 SURVEY OF POETRY (3)
PR: ENC 1104. A chronological sampling of the major poems written in English from the Middle Ages to the present. Requires as the first course in the poetry option.

LIT 3931 SELECTED TOPICS IN ENGLISH STUDIES (1-4)
Varying from semester to semester, the course examines in depth a predominant literary theme or the work of a select group of writers.

LIT 4011 THEORY OF FICTION (4)
Intensive study of the genres and varieties of fiction to ascertain the theoretical and technical problems involved in the work of fiction.

LIT 4930 SELECTED TOPICS IN ENGLISH STUDIES (1-4)
The content of the course will be governed by student demand and instructor interest. It will examine in depth a recurring literary theme or the work of a small group of writers. Special courses in writing may also be offered under this title. May be repeated for different topics.

REA 0105 DEVELOPMENTAL READING (2)
Designed to help students develop maximum reading efficiency. The course includes extensive instruction and laboratory practice in the improvement of adequate rates of reading, vocabulary, and comprehension skills. An independent study approach is also available for students who prefer to assume responsibility for their own progress.

REA 2405 SPEED READING DEVELOPMENT (2)
A course designed to develop speed reading techniques on various levels of difficulty. Emphasis is placed on comprehension via numerous practice drills. Will not be counted toward the English major. (S/U only.)

REA 3505 VOCABULARY (3)
A practical course in rapid vocabulary improvement for students in all areas. Stress is on words in context. Will not be counted toward the English major.

GRADUATE COURSES

AML 6017 STUDIES IN AMERICAN LITERATURE BEFORE 1860 (3)
PR: Graduate standing. Selected focused studies in American literature before 1860; the Puritans, Franklin, Cooper, Irving, Poe, Emerson, Hawthorne, Melville, and others. May be retaken with different subject matter three times.

AML 6018 STUDIES IN AMERICAN LITERATURE 1860 to 1920 (3)
PR: Graduate standing. Selected focused studies in American literature: Whitman, Twain, Howells, James, Crane, Dreiser, and others. May be retaken with different subject matter three times.

AML 6027 STUDIES IN MODERN AMERICAN LITERATURE (3)
PR: Graduate standing. Modern American drama, poetry, fiction, and literary criticism; authors include Faulkner, Hemingway, Fitzgerald, O'Neill, Anderson, Wolfe, Cummings, Frost, and Eliot. May be retaken with different subject matter three times.

ENG 6009 BIBLIOGRAPHY FOR ENGLISH STUDIES (2)
PR: Graduate standing. Detailed study of bibliographies of cultural milieus, genres, periods, and authors. Consideration of the profession's standards and procedures for publishing scholarly research. In addition to library research, the student will also submit one scholarly article of publishable quality.

ENG 6017 STUDIES IN STYLE (3)
(Advanced Composition for Teachers)
PR: Graduate standing. Poetics, rhetoric, dramatic style, prose style, short fiction, the novel, and the essay. May be retaken with different subject matter three times.

ENG 6018 SCHOLARSHIP AND CRITICISM (3)
PR: Graduate standing. Selected focused study of research approaches to English. May be retaken with different subject matter once.

ENG 6916 DIRECTED RESEARCH (var.)
PR: GR. Master's level. Repeatable. (S/U only.)

ENG 6939 GRADUATE SEMINAR IN ENGLISH (3)
PR: Consent of graduate adviser. May be retaken with different subject matter to a maximum of six hours.

ENG 6971 THESIS: MASTER'S (var.)
Repeatable. (S/U only.)

ENG 7916 DIRECTED RESEARCH (var.)
PR: GR. Ph.D. level. Repeatable. (S/U only.)

ENG 7939 DOCTORAL SEMINAR (3)
PR: Admission to Ph.D. Program. This seminar provides intensive small-group discussion as well as shared and individual guided research in a student's area of doctoral specialty. Repeatable up to six credit hours.

ENG 7980 DISSERTATION: DOCTORAL (var.)
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

ENL 6206 STUDIES IN OLD ENGLISH (3)
PR: Graduate standing. A study of Old English language, prose style, poetry. May be retaken with different subject matter three times.

ENL 6216 STUDIES IN MIDDLE ENGLISH (3)
PR: Graduate standing. Selected focused studies in language and in various authors and writings, 1100-1500; Chaucer, the Pearl poet, Everyman, ballads, drama. May be retaken with different subject matter three times.

ENL 6227 STUDIES IN SIXTEENTH-CENTURY BRITISH LITERATURE (3)
PR: Graduate standing. Selected focused studies in sixteenth-century British literature; Shakespeare, Sidney, Spenser, Marlowe, and others. May be retaken with different subject matter three times.

ENL 6228 STUDIES IN SEVENTEENTH-CENTURY BRITISH LITERATURE (3)
PR: Graduate standing. Selected focused studies in British literature, 1600-1660; Bacon, Donne, Jonson, Herbert, Milton, and others. May be retaken with different subject matter three times.
ENL 6236 STUDIES IN RESTORATION AND EIGHTEENTH-CENTURY BRITISH LITERATURE (3)
PR: Graduate standing. Selected focused studies in Restoration-Eighteenth-Century British literature: Dryden, Defoe, Pope, Swift, Fielding, Sheridan, Johnson, Boswell, and others. May be retaken with different subject matter three times.

ENL 6246 STUDIES OF THE ENGLISH ROMANTIC PERIOD (3)
PR: Graduate standing. A study of pre-Romantic and Romantic prose, fiction, nonfiction, and poetry. May be retaken with different subject matter three times.

ENL 6256 STUDIES IN VICTORIAN LITERATURE (3)
PR: Graduate standing. A study of Victorian poetry, Victorian fiction, Victorian non-fictional prose, and Victorian drama. May be retaken with different subject matter three times.

ENL 6276 STUDIES IN MODERN BRITISH LITERATURE (3)
PR: Graduate standing. A study of Irish and English drama, the modern novel, poetry, criticism, and the short story. May be retaken with different subject matter three times.

LAE 6357 PROBLEMS IN COLLEGE ENGLISH INSTRUCTION: COMPOSITION (3)
PR: Graduate standing. An examination of the objectives of freshman English and an investigation of current techniques for achieving those objectives, emphasizing the problems of developing critical reading and the techniques of expository writing at the college level.

LAE 6389 PROBLEMS IN COLLEGE ENGLISH INSTRUCTION: LITERATURE (3)
PR: Graduate standing. A course that allows the prospective college English teacher to experiment with teaching techniques that will determine the most effective ways to teach literature and that will teach college English teachers the variety and importance of literary techniques and their relevance to subject matter.

LAE 6392 PRACTICE IN TEACHING COMPOSITION (1)
In semester I required of and open only to Teaching Assistants new to U. S. F.'s Freshman English program. Gives practical guidance in preparing to teach composition. Meets once a week for three hours. (S/U only.)

LAE 7376 PROBLEMS IN ADVANCED ENGLISH INSTRUCTION: COMPOSITION (3)
PR: Admission to the Ph. D. program in English. Apprenticed, closely supervised study of and practice in teaching of college and university advanced composition. Student may elect to work with nonfiction, fiction, or poetry.

LAE 7390 PROBLEMS IN ADVANCED ENGLISH INSTRUCTION AND SCHOLARLY RESEARCH (3)
PR: Ph. D. Candidacy. This course provides closely supervised training in upper-level college English instruction and experience with professional research. Experience in the lecture, seminar discussion, examining, evaluation, conferences, directing undergraduate research, course development, use of secondary materials, publication procedure, and collation.

LIN 5107 HISTORY OF THE ENGLISH LANGUAGE (3)
PR: Senior or Graduate standing. The course will trace the history of the English Language from its beginnings in Continental Europe, through the Anglo-Saxon and Middle English periods, the Renaissance, and the Nineteenth Century, to the present day with emphasis on both the structural development of the language and the political, social, and intellectual forces that determined this development.

LIT 6096 STUDIES IN CONTEMPORARY LITERATURE (3)
PR: Graduate standing. Drama, poetry, fiction, and literary criticism; authors to be studied include Ionesco, Thomas, Miller, T. Williams, Beckett, Camus, and Burgess. May be retaken with different subject matter three times.

LIT 6105 STUDIES IN CONTINENTAL LITERATURE (3)
PR: Graduate standing. General areas include the Renaissance, the Enlightenment, the Novel in Europe, the Romantic Movement on the Continent, and Classical Comedy. May be retaken with different subject matter three times.

LIT 6934 SELECTED TOPICS IN ENGLISH STUDIES (1-4)
PR: Graduate standing. Current topics offered on a rotating basis include The Nature of Tragedy; The Nature of Comedy and Satire; The Nature of Romanticism and Classicism; and The Nature of Myth, Allegory, and Symbolism. Other topics will be added in accordance with student demand and instructor interest.

HUMANITIES
Chairperson: S.L. Gaggi; Professors: T.B. Hoffman, H. Juergensen, G.S. Kashdin, E.M. Mackay (Emeritus), D.Rutenberg, L.L. Shackon (Emeritus); A.J. Sparks; Associate Professors: C.B. Cooper, S.L. Gaggi, H.B. Gowen, S.A. Zylstra; Assistant Professor: J.R. Spillane.

UNDERGRADUATE COURSES
HUM 2930 SELECTED TOPICS: An introductory course dealing with a recurrent theme in the arts or focusing on a particular artistic center (a nation or city at a particular time). May be repeated for a credit with change of content. May be repeated up to 8 credit hours.

HUM 3024 THE ARTS (3)
Analyses of selected works of film, literature, music, and visual arts, including a variety of periods, nationalities and art forms, emphasizing artistic diversity. Especially recommended for students intending to take 4000 and 5000 level Humanities courses at a future date.

HUM 3214 STUDIES IN CULTURE: THE CLASSICAL AND MEDIEVAL PERIODS (3)
Analyses of selected works of classical and medieval architecture, drama, sculpture, intellectual prose, and other art forms. Typical course focus is on architecture, drama, and intellectual prose.

HUM 3236 STUDIES IN CULTURE: THE RENAISSANCE AND THE NINETEENTH CENTURY (3)
Analyses of selected fiction, drama, painting, architecture, music and other art forms. Typical course focus is on painting and music.

HUM 3251 STUDIES IN CULTURE: THE TWENTIETH CENTURY (3)
Analyses of selected works of 20th Century art, primarily emphasizing film, with secondary emphasis on painting and fiction.

HUM 3271, 3273 THE CULTURE OF THE EAST AND WEST (4,4)
Masterpieces of music, visual arts, theatre, literature, and philosophy in varying cultural and historical situations.

HUM 3580 CURRENT SCENE (2)
Live performances in contemporary media will be followed by discussions. The course will emphasize recent developments in the arts with some special attention to current innovations. (S/U only.)

HUM 4433 CLASSICAL ARTS AND LETTERS (4)
PR: Sophomore standing or CI. Case studies in the arts and letters of the ancient world.

HUM 4434 CLASSICAL ARTS AND LETTERS (4)
PR: Sophomore standing or CI. Case studies in the arts and letters of the ancient world.

HUM 4435 MEDIEVAL ARTS AND LETTERS (4)
PR: Sophomore standing or CI. Case studies in the arts and letters of the middle ages.

HUM 4436 MEDIEVAL ARTS AND LETTERS (4)
PR: Sophomore standing or CI. Case studies in the arts and letters of the middle ages.

HUM 4437 RENAISSANCE ARTS AND LETTERS (4)
PR: Sophomore standing or CI. Case studies in the arts and letters of the Renaissance.

HUM 4440 THE ENLIGHTENMENT (4)
PR: Sophomore standing or CI. Case studies in the arts and letters of the Enlightenment.

HUM 4442 ARTS AND LETTERS OF THE ROMANTIC PERIOD (4)
PR: Sophomore standing or CI. Case studies in the arts and letters of the romantic period.

HUM 4444 NINETEENTH CENTURY ARTS AND LETTERS (4)
PR: Sophomore standing or CI. Case studies in the arts and letters of the nineteenth century.

HUM 4471, 4473 TWENTIETH-CENTURY ARTS AND LETTERS (4,4)
PR: Sophomore standing or CI. Case studies in the arts and letters of the twentieth century.

HUM 4905 DIRECTED STUDY (1-4)
Specialized individual study determined by the student's needs and interests.

HUM 4930 SELECTED TOPICS IN HUMANITIES (1-4)
PR: Sophomore standing or CI. This course will deal with a recurrent
theme in the arts as, for example, love or death, or will focus on artistic centers such as Renaissance Florence or Paris in the 1920's. Topics will vary; course may be repeated for credit with change of content.

**HUM 4931 SEMINAR IN HUMANITIES**
(4)  
PR: Humanities major or CI; Senior standing. Discussion of interdisciplinary humanities. Includes essay.

**HUM 4941 STUDY ON LOCATION**
(1-4)  
Prerequisites: None. The art of a culture will be examined during travel in groups, led by an instructor, to important cities or sites. Monuments, museums, architecture, plays, and/or concerts will be studied. Reading assignments and lectures.

**GRADUATE COURSES**

**HUM 5412 HUMANITIES IN THE ORIENT: INDIA**
(4)  
Examples from the arts and letters of India and the relationship of these arts to the Hindu and Buddhist philosophy-religions.

**HUM 5414 HUMANITIES IN THE ORIENT: CHINA**
(4)  
Examples from the arts and letters of China; their relationship to Taoism, Confucianism and other Chinese philosophies; Western influences on twentieth century Chinese arts and letters.

**HUM 5415 HUMANITIES IN THE ORIENT: JAPAN**
(4)  
Examples from the arts and letters of Japan, their relationship to Zen Buddhism and other Japanese philosophy-religions; Western influences on twentieth century Japanese arts and letters.

**HUM 5452, 5456 HUMANITIES IN AMERICA**
(4,4)  
Case studies in the arts and letters of the United States.

**HUM 5465 LATIN AMERICAN ARTS AND LETTERS**
(4)  
Analysis of selected Latin American works of art in their cultural context.

**HUM 5485 SELECTED NON-WESTERN HUMANITIES**
(4)  
Materials chosen from arts and letters of Asia, Oceania, and the Middle East. May be repeated for credit with change of content.

**HUM 6475 STUDIES IN CONTEMPORARY ARTS AND LETTERS**
(3)  
Concentration on major artists and recent trends.

**HUM 6493 STUDIES IN CLASSICAL ARTS AND LETTERS**
(3)  
PR: Graduate standing. Examples from the arts and letters of ancient Greece and their relationships to Aegean myths, religions and philosophies. Classical Greek influences on later cultures.

**HUM 6494 STUDIES IN MEDIEVAL ARTS AND LETTERS**
(3)  
PR: Graduate standing. Studies in medieval philosophies, visual arts, music, literature and architecture, and their inter-relationships.

**HUM 6495 STUDIES IN RENAISSANCE ARTS AND LETTERS**
(3)  

**HUM 6496 STUDIES IN ENLIGHTENMENT ARTS AND LETTERS**
(3)  
PR: Graduate standing. Studies in painting, sculpture, music, literature, and architecture in relation to philosophical determinism and political absolution.

**HUM 6497 STUDIES IN NINETEENTH CENTURY ARTS AND LETTERS**
(3)  
PR: Graduate standing. Examples from the arts and letters of the nineteenth century, their relationship to philosophical, social, and historical developments, and to the arts and letters of the twentieth century.

**HUM 6909 INDEPENDENT STUDY**
(var.)  
Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**HUM 6915 DIRECTED RESEARCH**
(var.)  
PR: GR. Master's level. Repeatable. (S/U only.)

**HUM 6934 SELECTED TOPICS IN HUMANITIES**
(1-3)  
Each topic is a course of study in a subject not covered by a regular course. May be repeated for credit with change of content.

**LANGUAGES**

**Director:** R.A. Preto-Rodas; **Professors:** C.W. Capsas, E.F. McLean, E.J. Neungard, R.A. Preto-Rodas; **Associate Professors:** C.J. Cano, R.A. Cherry, Jr., W.H. Grothmann, W.R. Hampton, D. Ierardo, V.E. Peppard, D.P. Schencck, C.E. Scruggs, J.C. Tatum; **Assistant Professors:** M. Esformes, A.J. Heichte.

**General Foreign Languages**

**UNDERGRADUATE COURSES**

**FOL 3100 GENERAL FOREIGN LANGUAGE I**
(1-4)  
A general purpose course that may be used for transfer of credit, credit by examination, and similar matters; may also be used for formal courses in less commonly taught languages or in professional translation.

**FOL 4200 GENERAL FOREIGN LANGUAGE II**
(1-3)  
A general purpose course that may be used for transfer of credit, credit by examination, and similar matters; may also be used for formal courses in less commonly taught languages or for workshops in professional interpreting.

**FOL 4905 DIRECTED STUDY**
(1-3)  
Departmental approval required.

**GRADUATE COURSES**

**ARA 3110 MODERN ARABIC I**
(4)  
An intensive study of basic skills: pronunciation, listening comprehension, speaking and some composition.

**ARA 3111 MODERN ARABIC II**
(4)  
PR: ARA 3110 or its equivalent. A continuation of ARA 3110. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.

**French**

**UNDERGRADUATE COURSES**

**Courses in Translation**

**FRT 3110 HIGHLIGHTS OF FRENCH LITERATURE IN TRANSLATION**
(3)  
A study in English of French life through writers since the revolution. Elective for students in all departments.

**FRE 1060 FRENCH FOR READING**
(3)  
Designed to provide a reading ability in French that will support research in other disciplines. Primarily for graduate students.

**FRE 1100 BEGINNING FRENCH I**
(4)  
The first course in the study of elementary French. Emphasis on the development of basic skills in comprehension, speaking and reading.

**FRE 1101 BEGINNING FRENCH II**
(4)  
PR: FRE 1100 or equivalent. A continuation of FRE 1100. May be taken concurrently with FRE 2200.

**FRE 2200 INTERMEDIATE FRENCH I**
(3)  
PR: FRE 1101 or equivalent. A review of the basic structure of French.

**FRE 2201 INTERMEDIATE FRENCH II**
(3)  
PR: FRE 2200 or equivalent. Readings in French on the intermediate level. May be taken concurrently with FRE 2200.

**FRE 3240 CONVERSATION I**
(4)  
PR: FRE 1101. For development of basic conversational skills.

**FRE 3420 COMPOSITION I**
(3)  
A fundamental composition course for students who have completed FRE 2200 or FRE 2201.

**FRE 3470 OVERSEAS STUDY**
(1-6)  
An intensive study-travel project in France. Prior approval and early registration required. May be repeated up to 12 credit hours.

**FRE 3500 FRENCH CIVILIZATION**
(3)  
Readings and discussion on the cultural history of France.

**FRE 4241 CONVERSATION II**
(4)  
PR: FRE 3240 or equivalent proficiency. Conversation practice with
concentration on current idiomatic usage. May be repeated for a total of 8 hours.

**FRE 4421 COMPOSITION II**
(3)
Continuation of French composition. This course is designed to follow FRE 3420.

**FRE 4905 DIRECTED STUDY**
(1-3)
Departmental approval required.

**FRE 4930 SELECTED TOPICS**
(1-3)
Study of an author, movement or theme.

**FRT 3110 See above—COURSES IN TRANSLATION**
(3)
A study of the novel from its early appearance to present times with emphasis on Flaubert, Zola, les Goncourt, Daudet.

**FRW 4100 INTRODUCTION TO FRENCH NOVEL**
(3)
A study of the history of the novel from its early appearance to present times with emphasis on the 19th and 20th centuries. Authors to be studied include Chretien de Troyes, Rabelais, Balzac, Flaubert, Proust, Camus, Sartre, Robbe-Grillet, and others. Specific content may vary from year to year.

**FRW 4101 INTRODUCTION TO FRENCH DRAMA AND POETRY**
(3)
A study of the history of drama and poetry. Will include medieval drama, Racine, Corneille, Moliere, Anouilh, Sartre, Ionesco and others. Will also include Villon, Ronsard, DuBellay, Lamartine, Hugo, Vigny, Musset, Baudelaire, Mallarme, Rimbaud, Valery, Peguy, Eliard, Apollinaire, Char, and others. Course content may vary from year to year.

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**GRADUATE COURSES**

**FLE 6829 GRADUATE INSTRUCTION METHODS**
(1-4)
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of four credits per student. (S/U only.)

**FRE 5422 ADVANCED WRITTEN EXPRESSION**
(3)
PR: FRE 4421, or equivalent. Course is designed to give advanced training in free composition in French.

**FRE 5504 CONTEMPORARY FRANCE**
(3)
PR: FRE 3500 or equivalent or graduate standing. An advanced course in French civilization and culture including an study of recent social, artistic and political trends as well as various current intellectual movements. Text and discussions in French.

**FRE 6910 DIRECTED RESEARCH**
(var.)
PR: GR. Master's level. Repeatable. (S/U only.)

**FRW 5222 CLASSICAL PROSE AND POETRY**
(3)
PR: FRW 4101. Emphasis on Mâcherbe, La Fontaine, Boileau, Descartes, and Pascal.

**FRW 5226 20TH CENTURY LITERATURE AND THEATRE**
(3)

**FRW 5283 THE 20TH CENTURY NOVEL**
(3)
PR: FRW 4100. Proust, Gide, Mauriac, Malraux, Camus, Robbe-Grillet.

**FRW 5310 CLASSICAL DRAMA**
(3)
PR: FRW 4101. Corneille, Moliere, and Racine.

**FRW 5415 LITERATURE OF THE MIDDLE AGES**
(3)
PR: FRW 4100 or 4101. Major genres, including epics, Arthurian romances, drama and lyric poetry. Reading in modern French translation.

**FRW 5420 LITERATURE OF THE RENAISSANCE**
(3)
PR: FRW 4100 or 4101. A study of Renaissance French humanism including Rabelais, Montaigne, and Pleide poets.

**FRW 5440 18TH CENTURY LITERATURE**
(3)
PR: FRW 4100. The classical tradition and the new currents of thought in the Age of Enlightenment.

**FRW 5530 PRE—ROMANTICISM**
(3)

**FRW 5535 ROMANTICISM AND EARLY REALISM**
(3)
PR: FRW 4101. A study of the romantic and early realistic movements with emphasis on Lamartine, Vigny, Musset, Hugo and Balzac.

**FRW 5556 NATURALISM AND REALISM**
(3)
PR: FRW 4100 or 4101. A detailed study of realism and naturalism with emphasis on Flaubert, Zola, les Goncourt, Maupassant, and Daudet.

**FRW 5934 SELECTED TOPICS**
(1-3)
PR: Upper-level or graduate standing. Study of an author, movement or theme.

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**GERMAN**

**UNDERGRADUATE COURSES**

**Courses in Translation**

**GET 3111 HIGHLIGHTS OF GERMAN LITERATURE IN TRANSLATION**
(3)
An analysis in English based on translations of the most significant works of the middle ages, of Luther, Grimmelshausen, Lessing, Goethe, Kant, Hegel, Nietzsche, Mann, Heidegger, Kafka, Hesse, and contemporary writers of current interest. Elective for students in all departments.

**GER 1060 GERMAN FOR READING**
(3)
Designed to provide a reading ability in German that will support research in other disciplines.

**GER 1100 BEGINNING GERMAN I**
(4)
Development of basic skills in listening and reading comprehension, speaking and writing of German.

**GER 1101 BEGINNING GERMAN II**
(4)
PR: GER 1100 or equivalent. Continued development of basic skills in listening and reading comprehension, speaking and writing German.

**GER 2200 INTERMEDIATE GERMAN I**
(3)
PR: GER 1101 or equivalent. A review of the basic structure of spoken and written German. May be taken concurrently with GER 2201.

**GER 2201 INTERMEDIATE GERMAN II**
(3)
PR: GER 1101 or equivalent. Readings in German on the intermediate level. May be taken concurrently with GER 2200.

**GER 3240 CONVERSATION I**
(3)
PR: GER 1101. For development of basic conversational skills.

**GER 3420 COMPOSITION I**
(3)
A fundamental course for students who have completed GER 2200 or GER 2201.

**GER 3500 GERMAN CIVILIZATION**
(3)
PR: GER 2200 or GER 2201. Readings in German on the cultural history of Germany.

**GER 4241 CONVERSATION II**
(3)
Free conversation based on the current German idiom.

**GER 4421 COMPOSITION II**
(3)
Practical training in modern German usage and differences of style.

**GET 3111 See above—COURSES IN TRANSLATION**

**GEW 4100 SURVEY OF GERMAN LITERATURE I**
(4)
Old High German and Middle High German literature in modern German translation; the literature of Humanism and Baroque, the classical period.

**GEW 4101 SURVEY OF GERMAN LITERATURE II**
(4)
The romantic period, 19th and 20th centuries.

**GEW 4900 DIRECTED STUDY**
(1-3)
Departmental approval required.

**GEW 4930 SELECTED TOPICS**
(1-3)
Study of an author, movement or theme.

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**GRADUATE COURSES**

**GER 5845 HISTORY OF THE GERMAN LANGUAGE**
(3)
A diachronic study to the study of the German language. The course traces the history and development of the language from Indo-European through Germanic, Old, Middle, and New High German.

**GER 6908 INDEPENDENT STUDY**
(var.)
Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)
A study of major trends in German literature from WWII with emphasis on Hauptmann, Schnitzler, Hofmannsthal, George Rilke, Kaiser, Heym, Trakl, Thomas Mann, Hesse, Kafka, Benn, Brecht.

Study of major sty styles in German literature from Kaiser, Heym, Trakl, Thomas Mann, Hesse, Kafka, Benn, Brecht.

Jenaer circle and Heidelberger circle; the late romantic period, the Selected drama on Borchert, Frisch, Durrenmatt, Boll, Uwe, Johnson, Grass, Aichinger, Eich Enzensberger, Bachmann.

Selected drama, critical writings by Lessing, Wieland, Kant.


Sources, form, content, and literary significance of Urfaust and Faust.

Selected dramas, philosophical and aesthetical writings.

A survey of Italian literature from the earliest monuments through the classicism of the 18th century.

A survey of Italian literature beginning with the Classicism of the 18th century and continuing to present.

A survey of Italian literature from the earliest monuments through the classicism of the 18th century.

To assist students who have already made a start in speaking Italian, who have not had the advantages of travel or who have non-Italian speaking parents, to improve their skill in speaking Italian. Current events; literary discussions; free conversation; prepared speeches. Differences of media, syntactical signal.

Study of an author, movement or theme.

A parallel study of fiction and film from post-war Neorealism to the present time. This course will be conducted in English with film viewing and lectures.

Graduate course required.

A parallel study of fiction and film from post-war Neorealism to the present time. This course will be conducted in English with film viewing and lectures.

English

A parallel study of fiction and film from post-war Neorealism to the present time. This course will be conducted in English with film viewing and lectures.

Italian

Study of an author, movement or theme.

An intensive study of basic skills: pronunciation, listening comprehension, speaking, and some composition.

A continuation of HEB 3110. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.

Undergraduate course.

The works of the fathers of the Renaissance—Dante, Petrarch, Boccaccio, Machiavelli, Castiglione and others—are read and discussed in English.

The first course in the study of elementary Italian. Emphasis is on the development of basic skills in comprehension, speaking, and reading.

The second course in the study of elementary Italian. Emphasis is on the development of basic skills in comprehension, speaking, and reading.

PR: ITA 1100 or equivalent. Readings in Italian on the elementary level. A review of the basic structure of spoken and written Italian.

PR: ITA 1100 or equivalent. Readings in Italian on the intermediate level. May be taken concurrently with ITA 2200.

To develop conversational fluency in spoken Italian. Intensive study of conversational skill based particularly upon the current Italian idiom. Syntax is intensified and the vocabulary and idiomatic expressions expanded.

A fundamental composition course for students who have completed ITA 2200 and ITA 2201.

Readings and discussion on the cultural history of Italy.

A parallel study of fiction and film from post-war Neo-realism to the present time. This course will be conducted in English with film viewing and lectures.

To assist students who have already made a start in speaking Italian, who have not had the advantages of travel or who have non-Italian speaking parents, to improve their skill in speaking Italian. Current events; literary discussions; free conversation; prepared speeches. Differences of media, syntactical signal.

Study of an author, movement or theme.

A parallel study of fiction and film from post-war Neorealism to the present time. This course will be conducted in English with film viewing and lectures.

English

A parallel study of fiction and film from post-war Neorealism to the present time. This course will be conducted in English with film viewing and lectures.

A parallel study of fiction and film from post-war Neorealism to the present time. This course will be conducted in English with film viewing and lectures.

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A parallel study of fiction and film from post-war Neorealism to the present time. This course will be conducted in English with film viewing and lectures.
development of basic skills in comprehension, speaking and reading.

RUS 1101 BEGINNING RUSSIAN I
PR: RUS 1100 or equivalent. Development of basic skills in listening, reading, speaking and writing.

RUS 3400 CONVERSATION AND COMPOSITION I
PR: First year Russian or equivalent. Development of basic skills in conversation, composition, and reading.

RUS 3500 RUSSIAN CIVILIZATION
A survey of the cultural history of Russia.

RUS 4401 CONVERSATION AND COMPOSITION II
PR: Previous course in series or equivalent. Continuation of RUS 3400.

RUS 4900 SELECTED TOPICS
Study of an author, movement or theme.

RUS 4905 DIRECTED STUDY
Departmental approval required.

RUT 3110 See above—COURSES

SPS 5567 CONTEMPORARY SPANISH
PR: SPN 3500 or equivalent or graduate standing. Advanced readings and discussions dealing with contemporary Spanish civilization and culture, including a study of recent social, artistic and political trends. Texts and discussions in Spanish.

SPN 5790 PHONOLOGY AND PHONETICS
PR: SPN 3000. A study of the Spanish sound system.

SPN 5845 HISTORY OF THE SPANISH LANGUAGE
Traces the development of Spanish from its Latin origins to the present.

SPN 6940 GRADUATE INSTRUCTION METHODS
Course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of three credits per student. (S/ U only.)

SPW 5245 THE PICARESQUE NOVEL
Realistic prose-fiction of the Renaissance and Golden Age.

SPW 5313 GOLDEN AGE DRAMA
PR: SPW 4100. Lope de Vega, Alarcon, Tirso, Calderon, and others.

SPW 5400 MEDIEVAL LITERATURE
PR: SPW 4100 or equivalent. Course gives an in-depth study of principal works and authors of the period such as El Poema de mio Cid, Libro de Buen Amor and La Celestina.

SPW 5482 POST CIVIL WAR LITERATURE
PR: SPW 4101. The drama and novel since 1936.

SPW 5535 ROMANTICISM
PR: SPW 4101. Poetry and drama of the first half of the 19th century.

SPW 5555 REALISM

SPW 5605 THE QUIJOTE
Cervantes' masterpiece Don Quijote de la Mancha.

SPW 5725 GENERATION OF 1898
PR: SPW 4101. The major figures of the period and their main followers.

SPW 5726 GENERATION OF 1927

SPW 5755 MEXICAN LITERATURE
PR: SPW 4130. Major writers of all genres. Emphasis on modern writers.

SPW 5765 LITERATURE OF ARGENTINA AND URUGUAY
PR: SPW 4131. Emphasis on the gaucheo theme and contemporary prose fiction.

SPW 5775 CARIBBEAN LITERATURE
PR: SPW 4130. Emphasis on contemporary Cuban and Puerto Rican literature.

SPW 5934 SELECTED TOPICS
PR: Upper-level or graduate standing. Study of an author, movement or theme.

SPW 6910 DIRECTED RESEARCH
PR: GR. Master's level. Repeatable. (S/ U only.)

SPW 6936 GRADUATE SEMINAR
Topics vary. May be repeated.

SPW 6971 THESIS: MASTER'S
Repeatable. (S/ U only.)
LIBERAL STUDIES

Program Director: J. B. Camp.

UNDERGRADUATE COURSES

IDS 3300 STRUCTURES OF KNOWLEDGE AND KNOWING (4)
Distinguishing the modalities of human knowledge and awareness as reflected in the classic distinctions: sensory/motor/emotive; normative/descriptive/non-rational; logical/mathematical; ethical/physical/moral; qualitative/quantitative; mind/will/body; substance and function.

IDS 3310 PROGRESS AND UTOPIA (4)
Examination of the modern backgrounds of contemporary awareness: particularly the development of historical awareness of ourselves as scientifically, technologically, and socially "progressive"—in relation to both utopic and non-utopic futures.

IDS 3320 FREEDOM AND THE SELF (4)
Analysis of the idea of freedom in relation to the idea of self, involving comparative treatment of the variety of standpoints of conceiving the individual personality in relation to the social context.

IDS 4344 SEMINAR: MAN AND NATURE (3)
PR: Senior standing or CI. Examination of aspects of contemporary theories of nature and man deriving in the liberal arts, to the purpose of developing a general assessment of contemporary knowledge and methods of knowing.

IDS 4930 SELECTED TOPICS (1-4)
Course content determined by students' and instructor's interests and needs.

LINGUISTICS


UNDERGRADUATE COURSES

ESL 1383 ENGLISH FOR FOREIGN STUDENTS I (3)
A special course for students learning English as a second language. Intensive study and drill in American English pronunciation and listening comprehension.

ESL 1384 ENGLISH FOR FOREIGN STUDENTS II (3)
PR: ESL 1383 or CI. Intensive study and drill in American English pronunciation and listening comprehension. Emphasis on diction and speaking skills.

LIN 3010 INTRODUCTION TO LINGUISTICS (3)
Introduction to the basic principles of linguistic science; phonological and grammatical analysis and description; language change and genetic relationships.

LIN 3081 LANGUAGE AND MEANING (3)
A survey introduction for non-specialists to the basic principles of semantics and the way language conveys ideas. This course is also available on WUSF/TV Channel 16 by the O. U. Program.

LIN 4040 DESCRIPTIVE LINGUISTICS (3)
PR: LIN 3010 or CI. Introduction to the basic techniques of formalizing linguistic descriptions through elementary phonological, morphological, and syntactic data solution-problems drawn from a variety of languages. Both taxonomic and generative analysis and descriptions will be developed and compared.

LIN 4377 LANGUAGE TYPES OF THE WORLD (3)
An introduction to linguistic typology consisting in a systematic comparison of characteristic representatives of the various language types, such as Vietnamese, Malay, Hungarian, Swahili, Sanskrit, Hebrew, and others. No knowledge of any of these languages on the part of the student is presumed.

LIN 4600 LANGUAGE AND SOCIETY (3)
PR: LIN 3010. An analysis of the interrelation of a language and the structure of the society using it. The linguistic behavior patterns characteristic of particular social, political, economic, and racial groups. Problems in communication between strata.

LIN 4701 PSYCHOLINGUISTICS (3)
PR: LIN 3010. The nature of linguistic structure and its correlates in behavior and perception. Examination of the hypotheses of Whorf, Chomsky, and others.

LIN 4710 LANGUAGE AND COMMUNICATION: ACQUISITION AND DEVELOPMENT (3)
PR: LIN 3010. A survey of current research and theory in the processes of normal acquisition and development of language and communication in children. The acquisition and development of phonology, syntax, semantics, pragmatics, and nonverbal communication and the role of language in general cognitive development.

LIN 4903 DIRECTED READING (1-3)
PR: CI. Readings in special topics. Must be arranged prior to registration.

LIN 4930 SELECTED TOPICS (1-3)
PR: CI. Course content depends upon student's needs and instructor's interest and may range over the entire field of linguistics.

GRADUATE COURSES

LIN 5231 COMMUNICATION SCIENCE: THEORY AND PRACTICUM (3)
PR: LIN 2200 or CI. Intensified instruction in neuroanatomy of oral-nasal cavities, ear, pharyngeal, laryngeal, and thoracic areas. Includes topics in phonological theory such as feature composition and markedness. Practice in IPA and identification of segments through Sona-Graph work.

LIN 5245 EXPERIMENTAL PHONETICS (3)
PR: LIN 2200 or CI. Intensified training in auditory discrimination of the sounds of American English. Detailed use of research findings, instruments, and methodologies in the laboratory study of normal speech. Development of phonetic skills of discrimination and reproduction of speech sounds.

LIN 6081 INTRODUCTION TO GRADUATE STUDY IN LINGUISTICS (3)
Required of all M.A. candidates. An introduction to the aims and methodologies of linguistics as a graduate discipline: The field of linguistics, its subdisciplines, and its relationship to adjacent arts and sciences; bibliographical resources; methods of research and research writing; and a brief survey of the historical development of linguistics and current issues in the field.

LIN 6107 STUDIES IN ENGLISH LANGUAGE AND LINGUISTICS (3)
PR: LIN 4100 and LIN 4370, or CI. An advanced study of the origin, historical development, and contemporary structure of British and American English in its social and cultural milieu, with emphasis upon modern techniques for linguistic analysis and description.

LIN 6110 DIRECTED RESEARCH (var.)
PR: Gr. Master's level. Repeatable. (S/U only.)

LIN 6117 HISTORY OF LINGUISTIC THOUGHT (3)
Survey of the development of language study in the West from Antiquity to the present: Classical and medieval theories of language; origins of traditional grammar; rationalist linguistic theory and philosophical grammar, and an examination of the origin of contemporary linguistic controversies.

LIN 6128 HISTORICAL LINGUISTICS (3)
An advanced survey of the principles and methodology of historical linguistics.

LIN 6139 TOPICS IN THEORETICAL LINGUISTICS (3)
Offerings will include current issues in any area of linguistic theory.

LIN 6146 COMPARATIVE LINGUISTICS (3)
The principles and methodology of comparative linguistics, focusing upon a major Indo-European subfamily, such as Romance, Germanic, or Balto-Slavic.

LIN 6233 ADVANCED PHONETICS (3)
PR: LIN 5231 or equivalent. Intensified training in close phonetic transcription. Work on dialects, intonation, distinctive feature theory and acoustic phonetics.

LIN 6240 PHONOLOGICAL DESCRIPTION (3)
Analysis of the phonological component of a grammar, its role and formal structures. The generative model is compared to taxonomic descriptions. Theory and data-solution problems.

LIN 6377 THE STRUCTURE OF A SPECIFIC LANGUAGE (3)
Analysis of the linguistic structures of both common and uncommon languages. May be repeated up to six credit hours with change in content/title.

LIN 6380 SYNTACTIC DESCRIPTION (3)
Analysis of syntactic descriptions of various languages through data-solution problems in co-occurrence relations, agreement, permutation, conjoining, and embedding. Feature grammars and other models are discussed.
LIN 6405 CONTRASTIVE ANALYSIS (3)
PR: LIN 4377. Comparison and contrast of the structures of American English with corresponding structures in selected foreign languages.

LIN 6435 FIELD METHODS (3)
PR: LIN 4040 and LIN 5231. An introduction to the techniques of gathering language data in the field and to make an analysis of such data. Native informants are brought on campus to replicate the field experience; students will become familiar with equipment and tools used by linguists in the field.

LIN 6440 GRADUATE INSTRUCTION METHODS (1-4)
Pr: CI. For selected assistants. Variable credit, repeatable. Limited to a cumulative total of four credits per student.

LIN 6450 APPLIED LINGUISTICS (3)
Analysis of the phonological, morphological and syntactic features of English as a basis for linguistic application to problems of English language acquisition by non-native speakers.

LIN 6601 SOCIAL LINGUISTICS (3)
Detailed analysis of the phenomenon of language variation with emphasis upon the research methodology of sociolinguistics and the implications of its findings for current linguistic theory.

LIN 6715 LANGUAGE ACQUISITION (3)
PR: LIN 3010, LIN 4377 or CI. A survey of current research and theory in the processes of normal language acquisition and development.

LIN 6810 SEMIOTICS (3)
PR: CI. Introduction to kinesics and paralinguistics; the linguistic structure of gesture, proxemics, and other significant areas of nonverbal communication and signaling behavior.

LIN 6820 STUDIES IN SEMANTICS (3)
Selected problems in the area of meaning and the relationship between linguistic structure and cognition. Mappings of presupposition, kinship fields, emotive concepts, and other problems are surveyed. Theories such as Fodor-Katz-Chomsky, Ross-Lakeoff-McCawley, and others are contrasted.

LIN 6908 INDEPENDENT STUDY (var.)
Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

LIN 6932 SELECTED TOPICS (1-4)
Content will depend upon instructor's interests and students' needs. Selected topics as neurolinguistics, bilingualism, and discourse analysis may be taught.

LIN 6940 GRADUATE INSTRUCTION METHODS (1-4)
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of four credits per student. (S/U only.)

LIN 6971 THESIS: MASTER'S (var.)
Repeatable. (S/U only.)

PHI 6226 LANGUAGE AND NATURE (3)
A study of the development of language as an instrument for ordering human consciousness in terms of European ideas of Nature, with special emphasis upon the dialectic, relational and popular modalities of conceptual representation.

PHI 6228 LANGUAGE AND LIMIT (3)
Introduction to the logic of natural languages including semantic analysis of logical relations between selected syntactic structures (active/passive, raising, case relations, etc.); logical dominance in semantic structure; application of logic to questions of linguistic meta-theory.

TSL 6371 METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE I (3)
PR: TSL 6371. Analysis of the methods of teaching English pronunciation and structure to speakers of other languages.

TSL 6372 METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE II (3)
PR: TSL 6371. Analysis of the methods of teaching English reading and listening comprehension and composition to speakers of other languages.

TSL 6945 INTERNSHIP (1-6)
Pr: TSL 6371 and TSL 6372. Required of all candidates for the M.A. degree in TESL. Supervised teaching of English as a second language to non-native speakers at appropriate levels and settings. May be repeated up to six credit hours. (S/U only.)

MASS COMMUNICATIONS

UNDERGRADUATE COURSES
ADV 3000 INTRODUCTION TO ADVERTISING (3)
PR: MMC 3100 and MMC 3602. A study of the structures, functions, and persuasive language of advertising in mass media with attention to social, political, economic, and legal aspects.

ADV 3101 ADVERTISING COPY (3)
PR: ADV 3000 and ECO 2023. Study of laboratory experience in preparation of advertising copy for newspapers, magazines, radio, television, direct mail, outdoor displays, and special items.

ADV 3103 RADIO-TELEVISION ADVERTISING (3)
PR: ADV 3000. An intensive study and analysis of radio and television for advertising purposes, including copywriting, script and storyboard preparation, time buying and selling techniques, audience research methods, and basic production concepts.

ADV 3300 ADVERTISING MEDIA STRATEGY (3)
PR: ACG 2001, ADV 3000, ECO 2023 and ECO 2013. Problems, techniques, strategies and media research, planning, budgeting, and effective utilization in advertising.

ADV 3700 RETAIL ADVERTISING PLANNING AND EXECUTION (3)
PR: ADV 3000 and ADV 3101. A study of retail advertising, including management decisions, processes, procedures, media planning, production techniques, and problems affecting the development of advertising to fulfill retail objectives.

ADV 4001 ADVERTISING CAMPAIGNS (3)
PR: ACG 2001, ADV 3101, ADV 3300, ECO 2013, ECO 2023, and MAR 3023. Advanced advertising course requiring planning and production of complete general advertising campaign, including research, production methods, budgeting, and media schedules.

ADV 4900 ADVERTISING PRACTICUM (1)
PR: Senior standing Cl. For selected advertising sequence majors. Practical experience outside the classroom in a live advertising situation where the student works for academic credit under the tutelage of a professional practitioner. (S/U only.)

FIL 3004 THE FILM AS MASS COMMUNICATION I SYNTAX (3)
PR: MMC 3100 and MMC 3602. The language, conventions, elements, and patterns of the film medium as related to current models of effective mass communication and new theories of non-verbal communica­tion. Concurrent laboratory experiences in control of light and line.

FIL 3200 THE FILM AS MASS COMMUNICATION II: RHETORIC AND STYLISTICS (3)
PR: FIL 3004. A continuation of FIL 3004 to include the effective arrangements of scenes and sequences in motion picture and television films. Concurrent laboratory experiences in sound and editing.

FIL 3300 THE FILM AS MASS COMMUNICATION III: WORKSHOP (3)
PR: FIL 3200. Practical exercises, demonstrations, and experiences in applying material covered in FIL 3004 and FIL 3200.

FIL 4025 ADVANCED CAMERA TECHNIQUES (3)
PR: FIL 3004. Advanced camera technology, professional procedures, emulsion selection, color control, studio and location shooting, labora­tory methods, matte shooting, and special effects.

FIL 4026 ADVANCED FILM LIGHTING (3)
PR: FIL 4205. Advanced lighting of studio and location sets stressing professional procedures and standards from preproduction to post­production.

FIL 4027 SENSITOMETRY AND PHOTOMETRICS (3)
PR: FIL 3004. The materials and processes of cinema photo; response of materials to development and exposure.

FIL 4028 FILM DIRECTING (3)
PR: FIL 3004. Introduction to the techniques of film frame movement. Concurrent laboratory in subject and camera movement.

FIL 4300 THE DOCUMENTARY FILM (3)
PR: Sophomore standing. The development of the documentary movement; earliest newsreels; Flaherty, Grierson and the GPO Unit.
U.S. Government-sponsored films, the Canadian Film board, Cinema Verite; study of about 60 fact-films from some 20 countries. Stresses objective criteria, critical analysis.

**FIL 4403 SOCIAL HISTORY OF THE FILM TO 1945**

PR: MMC 3100 and MMC 3602. The industrial, technological, philosophical, and social factors bearing on the rise and development of the motion picture as a popular art. Intensive study of a series of films through screenings and readings.

**FIL 4404 SOCIAL HISTORY OF THE FILM, 1945 TO THE PRESENT**

PR: MMC 3100 and MMC 3602. A continuation of FIL 4403, covering the development of the film from 1945 to the present. (FIL 4403 is not a prerequisite.)

**JOU 3006 MAGAZINES IN SOCIETY**

PR: MMC 3100 and MMC 3602. A study of the development of various types of magazines in America, and a critical analysis of current problems and performances of periodicals along with changes indicated for the future.

**JOU 3100 BEGINNING REPORTING**

PR: MMC 3100 and MMC 3602. Basic instruction in news judgment, sourcing of news, newsgathering, and newswriting techniques. Typing ability is required.

**JOU 3101 ADVANCED REPORTING**

PR: POS 2041, JOU 3100, or RTV 3300 (RTV majors only), JOU 4200, and PHI 1103. Getting information and writing the more complex and specialized story, techniques of investigative and analytical reporting, including ethical and legal considerations.

**JOU 3205 TYPOGRAPHY I**

PR: MMC 3100 and MMC 3602. The history and design of type, major classifications of type faces, typographic nomenclature, printer's measurements, and the science of type design and identification. Laboratory work.

**JOU 3300 MAGAZINE ARTICLE AND FEATURE WRITING**

PR: CRW 3100, JOU 3100. Planning, researching, writing, and marketing articles for general and special interest magazines and newspaper magazine supplements; experiences in developing article ideas; inductive analysis of contemporary magazine articles.

**JOU 3306 CRITICAL WRITING: EDITORIALS, REVIEWS, COLUMNS**

PR: JOU 3101, JOU 4200. Interpretive and opinion writing for the mass media. Analysis and discussion of current events as a basis for critical thinking and editorial writing; evaluation of editorial pages of leading newspapers. Study of journalistic techniques involved in writing art, drama, music and book reviews and satire, sports, or personal columns.

**JOU 3940 REPORTING PRACTICUM**

PR: JOU 4104 and CI. For selected News-Editorial Sequence majors. Practical experience outside the classroom in a live newspaper reporting situation where the student works for academic credit under tutelage of a professional practitioner. (S/U only)

**JOU 4104 PUBLIC AFFAIRS REPORTING**

PR: JOU 3101, POS 2041 and POS 3142. Covering city council meetings, courthouse, city hall, courts, society, and other special assignments. Emphasis is on coverage of major governmental units of all levels of government, including examination and interpretation of public documents and records.

**JOU 4200 NEWS EDITING I**

PR: ECO 2013, JOU 3100, and SYG 1010. Evaluating news and its display; editing and rewriting copy for the mass media, with emphasis on the daily newspaper; news judgement, headlines, makeup; ethical problems.

**JOU 4202 NEWS EDITING II**

PR: JOU 4200, POS 2041. Continuation of JOU 4200, with more intensive practice on the copydesk in evaluating, processing, editing, and headlining live wire copy and local copy; experimental makeup; managing the copy desk. Current events and analysis of selected daily newspapers.

**JOU 4206 NEWSPAPER DESIGN AND TYPOGRAPHY**

PR: JOU 3205 and JOU 4200 or CI. Theoretical and practical applications of newspaper design; problems in newspaper layout; the research of newspaper typography and design and its application; redesign of contemporary newspapers.

**JOU 4208 MAGAZINE EDITING AND PRODUCTION**

PR: JOU 3300, JOU 4200. A study of magazines in America: preparation of copy, photographs and art for printing; issue planning and design; examination of production methods, including printing typography and mechanicals. Preparation of a detailed proposal and comprehensive for a hypothetical magazine.

**JOU 4500 NEWSPAPER ORGANIZATION AND MANAGEMENT**


**JOU 4800 MASS MEDIA STUDIES**

PR: Junior standing. JOU 3100, MMC 3602. Intensive review of mass communications theory, practice, and content as they relate to teaching mass media in secondary schools, with some emphasis also on supervision of school publications. Not open to Mass Communications majors.

**JOU 4941 EDITING PRACTICUM**

PR: Senior standing JOU 4202 and CI. For selected News-Editorial Sequence majors Practical experience outside the classroom at a daily newspaper copydesk, where the student works for academic credit under the tutelage of a professional news editor. (S/U only)

**JOU 4944 MAGAZINE PRACTICUM**

PR: Senior standing and CI. For selected Magazine Sequence majors. Practical experience outside the classroom in a live magazine or industrial publication situation where the student works for academic credit under the tutelage of a professional practitioner. (S/U only)

**MMC 3000 SURVEY OF MASS COMMUNICATIONS**

PR: MMC 3100 and senior standing. An introduction to the function of agencies of mass communications and their impact upon society; critical analysis of press performance in relation to current events; evaluation of press through a study of its history. Not open for credit to Mass Communications majors.

**MMC 3101 WRITING FOR THE MASS MEDIA**

PR: Sophomore standing; 2.5 GPA; grade of “C” in ENC 1101, ENC 1104, typing proficiency, and passing score on English Diagnostic Test. An introduction to the basic skills of writing for the mass media with practice in library research, persuasive writing, and informational writing.

**MMC 3602 MASS COMMUNICATIONS AND SOCIETY**


**MMC 3700 THE POPULAR ARTS IN AMERICA**

A survey of the growth of the popular arts (motion pictures, radio, television, art best sellers, jazz and other forms of music, the comics, etc.) as mirrors, transmitters and transformers of American cultural values.

**MMC 3936 SELECTED TOPICS IN MASS COMMUNICATIONS STUDIES**

Courses designed to meet current or specific topics of interest to the instructor and students.

**MMC 4123 MEDIA SCRIPT WRITING**

PR: MMC 3100 and MMC 3602. An introduction to the techniques of writing scripts for photographic and multi-media presentation, electronic media, and industrial and documentary film.

**MMC 4200 HISTORY AND PRINCIPLES OF COMMUNICATIONS LAW**

PR: MMC 3100 and MMC 3602. Historic and Constitutional back-grounds of freedom and control of expression, statutory enactments, major Supreme Court cases, court decisions and administrative rulings which have shaped legal control of communications.

**MMC 4201 GOVERNMENT AND THE MEDIA**

PR: MMC 4200. The relationships between government and the media, with emphasis on current activities of such regulatory agencies as the Federal Communications Commission, the Federal Trade Commission and other commissions; the courts, the Congress and the Executive; examination of the media and industry codes and standards.

**MMC 4300 INTERNATIONAL COMMUNICATION**

Mass communications as internal and international systems; flow of the news; international news communications network; satellite communications, overseas activities of American media interests; international media organizations and their activities.

**MMC 4420 RESEARCH METHODS IN MASS COMMUNICATIONS**

PR: MMC 3100, MMC 3602, and/or CI. An introduction to the theory and practice of quantitative and historical research methods as applicable to the study of media and mass communications. Emphasis on
survey research, evaluation of data, and report writing.

MMC 4900 DIRECTED READING IN MASS COMMUNICATIONS (1-3)
PR: Junior standing, CC and CI. Reading and directed study in special topics.

MMC 4910 INDIVIDUAL RESEARCH IN MASS COMMUNICATIONS (1-3)
PR: CC and CI. The course provides means for a student to do independent study in an area not covered by a numbered course.

MMC 4936 SELECTED TOPICS IN MASS COMMUNICATIONS (1-3)
PR: Junior standing. Courses designed to meet current or specific topics of interest to instructors and students.

MMC 4945 MEDIA INTERNSHIP—SEMINAR (3)
PR: CI and 15 hours in Mass Com. courses and completion of an 8-12 week media internship with newspaper, broadcast station, or other media-related agency approved by the department and paid by the sponsor. Reports on experiences for discussion and evaluation. (S/U only.)

PUR 3000 PRINCIPLES OF PUBLIC RELATIONS (3)
PR: ECO 2013 and MAN 3025, MMC 3100 and MMC 3602. The functions of public relations within corporate and institutional structures; ethical standards of practice, and relationships of the practice to the public media and other modes of contemporary communication.

PUR 4001 ADVANCED PUBLIC RELATIONS (3)
PR: PUR 3000 and PUR 4100. As final course in PR sequence, it involves intensive study of counseling and problem-solving techniques used in professional practice. Analysis of case studies and preparation of complete PR program. Extensive reading in the literature of contemporary practice.

PUR 4000 WRITING FOR PUBLIC RELATIONS (3)
PR: JOU 3100, PUR 3000. Persuasive writing techniques unique to the practice of public relations; application of principles and ethical practices to problem-solving situations drawn from case studies; writing formats used in promotional and publicity literature.

PUR 4601 PUBLIC INFORMATION (3)
PR: POS 2041, POS 2112, and PUR 4100. The nature of government public information, information in the organization, practices, and criticisms thereof; the role of information specialists in reporting government at all levels to the public; conceptual differences in approach and techniques between governmental and private sector public relations.

PUR 4700 PUBLIC RELATIONS PRACTICUM (1)
PR: Senior standing and CI. For selected Public Relations Sequence majors. Practical experience outside the classroom in a professional public relations situation where the student works for academic credit under the tutelage of a professional practitioner.

RTV 3000 INTRODUCTION TO BROADCASTING (3)
PR: MMC 3100 and MMC 3602. A survey of the organization, structure, and function of the broadcasting industry.

RTV 3100 WRITING FOR RADIO AND TV (3)
PR: ENC 3310 or CRW 3100, RTV 3000. The writing of radio and television scripts such as documentaries, children's programs, commercials, dramas, talks, and demonstrations.

RTV 3210 RADIO PRODUCTION AND DIRECTION (3)
PR: RTV 3000. Radio production and direction; laboratory and broadcast experiences.

RTV 3225 VIDEO WORKSHOP (1)
PR: MMC 3100 and MMC 3602 or CI. An introduction to the techniques and applications of field television production and electronic editing.

RTV 3230 BROADCASTING ANNOUNCING (3)
PR: ORI 3000, RTV 3000, SPC 2023 or SPC 2050 or THE 2020. Development of skills required for effective announcing and other appearances before microphone and camera.

RTV 3300 BROADCAST NEWS (3)
PR: RTV 3000. The study and methods in gathering, writing, and editing newscasts for radio and television.

RTV 3941 RADIO PRACTICUM (1)
PR: RTV 3210 and CI. The study, rehearsal, and production of radio programs and materials. (S/U only.)

RTV 4205 ADVANCED TV PRODUCTION AND DIRECTION (3)
PR: RTV 4220 and junior standing. Intensive study and practice of the techniques of TV production and direction with emphasis on both creative and experimental aspects of TV programming.

RTV 4220 TV PRODUCTION AND DIRECTION (3)
PR: RTV 3000 and junior standing. A basic course in the techniques of producing and directing TV programs.

RTV 4301 TV NEWS FILM (3)
PR: RTV 3300. Techniques in writing and filming for television news.

RTV 4402 MEDIA CRITICISM: BROADCASTING (3)
PR: RTV 3000. A critical study of contemporary broadcast content.

RTV 4500 THE BROADCAST PROGRAM (3)
PR: RTV 3000. Program concepts, resources, costs, selection and scheduling. Analysis of programming in terms of structures, appeals and strengths.

RTV 4700 BROADCAST LAW (3)
PR: RTV 3000. A study of broadcasting industry from the perspective of governmental regulation and the political process with special emphasis on how regulatory policy is determined.

RTV 4942 TV PRACTICUM (1)
PR: RTV 4220 and CI. The study, rehearsal and production of television programs and materials. (S/U only.)

VIC 3000 INTRODUCTION TO VISUAL COMMUNICATIONS (3)
PR: MMC 3100 and MMC 3602. The survey of visual communication theory, techniques, and their contemporary application and social influences as applied to the visual media with emphasis on still photography, motion pictures, video tape, and graphs.

VIC 3100 PHOTOJOURNALISM I (3)
PR: MMC 3100 and MMC 3602. Camera operation, darkroom techniques, picture composition; editing, ethics, history, and laws in connection with photography.

VIC 3102 PHOTOJOURNALISM II (3)
PR: VIC 3100. Advanced process and practice of photography for publication. Content includes advanced camera and laboratory techniques, publication requirements and theory of photochemical color separation used in magazine and newspaper. Emphasis is placed on student production.

VIC 3943 VISUAL COMMUNICATION PRACTICUM (1)
PR: Senior standing and CI. For selected Visual Communications sequence majors. Practical experience outside the classroom in a professional environment where the student works for academic credit under the tutelage of a professional practitioner. (S/U only.)

VIC 4103 COLOR PHOTOGRAPHY (3)
PR: VIC 3102. Development of knowledge and skills of color photography for publication and presentation. Emphasis is on the use of transparency and negative color materials in their application to the media. Laboratory required.

GRADUATE COURSES

ADV 6503 MEDIA AND MARKET ANALYSIS (3)
An advanced study of the demographic, geographic, and social-psychographic descriptions of media and markets to analyze mass media audiences, costs and uses to aid in solving marketing communications problems for advertisers.

ADV 6602 ADVERTISING MARKETING DECISIONS (3)
A study of managerial problems in planning, controlling, and evaluation of advertising with emphasis on the decisions concerning products, pricing, competitive positioning, distribution and promotion.

JOU 6107 ADVANCED URBAN AFFAIRS REPORTING (3)
Problems and methods of reporting urban affairs, including municipal government and politics: city, county and state. Research/analyses of current issues.

JOU 6191 SEMINAR: CONTEMPORARY NEWSPAPER PROBLEMS (3)
A study of the role of the free press in a democratic society and its efforts to fulfill its social and ethical responsibilities by analyses and discussions of the problems which face the reporter, the editor, and the publisher.

MMC 6303 INTERNATIONAL COMMUNICATIONS SEMINAR (3)
Mass Communications as national and international systems; flow of the news; international news communications networks; satellite communications; overseas activities of American media interest; international propaganda; communication and national development; international media organizations and their activities.

MMC 6401 MASS MEDIA STRUCTURES (3)
The study of mass communications theories, structures, influences, and their relationships to institutions in American society.

MY C 6421 RESEARCH METHODS IN MASS COMMUNICATIONS (3)
The theory and practice of quantitative, historical, and critical research
methods, and their applications to the study of mass communication. Emphasis on experimental and survey research, statistical analysis, and evaluation of data.

**MMC 6605 PUBLIC OPINION AND THE MASS MEDIA** (3) The influence of public opinion on private and public institutions in a democratic society and the role of the mass media in opinion formation. The nature of persuasion in establishing or modifying public opinion, and perspectives on the social responsibilities of communicators.

**MMC 6612 SEMINAR: GOVERNMENT AND THE MEDIA** (3) PR: MMC 4200 or equivalent. Interrelationships of the media and government at the judicial, executive and legislative levels. Focus is on legal limitations and privileges of the media, with emphasis on the First Amendment; research procedures in court and administrative agency documents.

**MMC 6900 DIRECTED READINGS IN MASS COMMUNICATIONS** (1-3) PR: CI and graduate adviser. Readings in specialized areas of Mass Communications as agreed to by the instructor and the student by contract. May be repeated up to 3 credit hours. (S/U only.)

**MMC 6910 INDIVIDUAL RESEARCH IN MASS COMMUNICATIONS** (1-3) PR: CI and graduate adviser. Independent study in which the student must have a contract with the instructor to study an area not covered by other courses in the graduate curriculum. May be repeated up to 3 credit hours. (S/U only.)

**MMC 6921 MASS COMMUNICATIONS SEMINAR** (1) PR: Admission to the Graduate Program. The discussion of current projects in mass communications research among graduate students and faculty. May be repeated up to 3 credit hours. (S/U only.)

**MMC 6936 SELECTED TOPICS IN MASS COMMUNICATIONS** (3) Courses designed to meet current, specific topics of interest to students and instructors.

**MMC 6945 PROFESSIONAL PRACTICUM** (3) PR: Minimum of 12 graduate hours in Mass Communications Practicum will consist of placement with a media related organization selected by the student and approved and supervised by the graduate adviser. (S/U only.)

**MMC 6971 ThESIS: MASTER'S** (var.) Repeatable. May be taken for varying credit in successive semesters up to 6 credit hours. (S/U only.)

**PUR 6603 PUBLIC RELATIONS COUNSELING** (3) Relationship of the public relations counselor to the client or employer; counseling in corporate, not-profit and governmental organizations; writing and presenting PR programs to the client; management and operation of counseling firms.

**PUR 6604 STANDARDS OF PUBLIC RELATIONS PRACTICE** (3) Historical perspective of ethical practice; the professional's role as advocate for the client and ombudsman between the client and his public; codes of conduct; administrative and statutory law governing the practice; progress towards professional status.

**RTV 6400 HISTORY AND CRITICISM OF BROADCASTING** (3) The origin and development of broadcast programming stressing how radio and television content affect social, cultural, and political values. Study will also include critical examination of broadcast aesthetics and those factors which determine program form and function.

**RTV 6702 TELECOMMUNICATIONS AND PUBLIC POLICY** (3) An exploration of the emerging problems of telecommunications policy, especially the regulation of news systems of communications, and the development of communications policy in a post-industrial age.

**VIC 6005 SEMINAR IN VISUAL COMMUNICATIONS** (3) Development of message preparation in the integration of visual and verbal images, emphasis on the management and planning of still photography, video, film, graphic design, and typography in effective communication.

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**PHILOSOPHY**

Chairperson: W.H. Truitt; Professors: J.P. Anton, J.A. Gould, W.H. Truitt; Professor Emeritus: C.H. Chen; Associate Professors: J.A. Bell, B.R. Boxill, L.L. McAllister, B.Silver, R.N. Taylor, R.C. Weatherford; Assistant Professors: J.Bell; Courtesy Associate Professors: M. Myerson.

**UNDERGRADUATE COURSES**

**PHI 3000 INTRODUCTION TO PHILOSOPHICAL TRADITIONS** (3) An historical introduction to selected philosophical traditions through readings from representative thinkers.

**PHI 3100 ANCIENT AND MEDIEVAL PHILOSOPHY** (3) A survey of philosophy from the pre-Socratics through Plotinus.

**PHI 3420 MODERN PHILOSOPHY** (3) A survey of Western philosophy from Descartes through Thomas Reid.

**PHI 3440 RECENT PHILOSOPHY** (3) A survey of philosophy from Kant through nineteenth century philosophy.

**PHI 4600 CONTEMPORARY PHILOSOPHY** (3) PR: Eight hours of philosophy or CI. Selected schools of twentieth century thought such as idealism, positivism, pragmatism, realism, and existentialism.

**PHI 4700 AMERICAN PHILOSOPHY** (3) Major traditions in American thought—Puritanism, the Enlightenment, Transcendentalism, Idealism, Pragmatism, and Analytic Philosophy—in relation to American culture.

**PHI 1000 GREAT PHILOSOPHERS OF THE WESTERN WORLD** (2) Lectures and discussions of the great philosophers since Plato, focusing on particular problems.

**PHI 1410 PHILOSOPHY OF CONTROVERSIES** (2) A discussion of central controversies in philosophy such as the nature of love, violence, freedom, truth, morality, etc.

**PHI 1103 PRACTICAL LOGIC** (2) Elementary theory and application of logical fallacies, deductive and inductive logic. Not for majors.

**PHI 3011 INTRODUCTION TO PHILOSOPHICAL PROBLEMS** (3) An introduction to major philosophical problems through readings from representative thinkers.

**PHI 3100 LOGIC** (4) Language analysis and classical modern formal logic, including the logic of classes and propositions, and discussion of philosophical issues.

**PHI 3404 SCIENTIFIC METHOD** (3) Probability, inductive inference, the hypothetic-deductive method, experimentation, and selected topics in the philosophy of science.

**PHI 3460 ETHICS** (3) An examination of the writing of the philosophers: Plato, Aristotle, Kant, Sartre, etc., about moral problems and principles.

**PHI 3601 CONTEMPORARY MORAL ISSUES** (3) Open to all students—A study of contemporary moral issues concerning racism, sex, sexism, abortion, poverty, crime, war, suicide, and human rights in general.

**PHI 3700 PHILOSOPHY OF RELIGION** (3) Analysis of religious experience and activity and examination of principal religious ideas in light of modern philosophy.

**PHI 3905 DIRECTED STUDY** (1-4) PR: CI. Individual study directed by a faculty member. Approval slip from instructor required.

**PHI 3930 SELECTED TOPICS** (1-4) PR: CI. Selected topics according to the needs of the student.

**PHI 4320 PHILOSOPHY OF MIND** (3) PR: Eight hours of philosophy or CI. A study of historical and current issues in philosophy of mind, including the nature and status of mind, body dualism, the relationship of mind and body, the problems of other minds, the physical basis for intelligence, etc.

**PHI 4360 THEORY OF KNOWLEDGE** (3) An examination of human knowledge; its scope and limits, and an evaluation of evidence, criteria of truth, the nature of belief, conditions for meaningfulness, theories of perception, and a study of memory and sense perception in the four major fields of nature, history, personal experience, and the a priori.

**PHI 4800 AESTHETICS** (3) A study of traditional and contemporary aesthetic theories with emphasis on creative process, the nature of the art work, the aesthetic response, expressiveness, form and content as well as art and morality.

**PHI 4905 DIRECTED STUDY** (1-4) PR: CI. Individual study directed by a faculty member. Approval slip from instructor required.

**PHI 4930 SELECTED TOPICS** (1-3) PR: CI. Selected topics according to the needs of the senior students.
The instructor will determine the subject matter. Variable titles:

PR: Cl. Selected topics according to the needs of the student. Approval slip from instructor required.

PHI 6105 SEMINAR IN LOGIC
PR: Graduate standing or Cl. Foundations and basic problems of logic. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

PHI 6305 SEMINAR IN EPISTEMOLOGY
PR: Major in philosophy or psychology and Cl. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

PHI 6405 SEMINAR IN THE PHILOSOPHY OF NATURAL SCIENCE
PR: Graduate standing or Cl. A study of the nature and status of physical theories, some basic problems associated with scientific methodology, and the philosophical implications of modern science. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

PHI 6425 SEMINAR IN THE PHILOSOPHY OF SOCIAL SCIENCES
PR: Eight hours of philosophy or Cl. Philosophic issues arising in the social sciences; value assumptions, laws and theories, models, etc. Seminar format.

PHI 6605 SEMINAR IN ETHICS
PR: Graduate standing and Cl. Advanced study of the problems of moral philosophy. May be repeated up to 9 credit hours.

PHI 6808 SEMINAR IN AESTHETICS
PR: Graduate standing or Cl. An analysis of fundamental aesthetic concepts in terms of contemporary philosophy. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

PHI 6908 DIRECTED RESEARCH
PR: Graduate standing. Repeatable. (S/U only.)

PHI 6934 SELECTED TOPICS
PR: Graduate standing and Cl. Selected topics according to the needs of the student. Approval slip from instructor required.

PHI 6945 GRADUATE INSTRUCTION METHODS
PR: Graduate standing. Selected topics according to the needs of the student. Approval slip from instructor required.

PHI 6971 THESIS: MASTER'S
Repeattable. (U/S only.)

PHM 6105 SEMINAR IN SOCIAL PHILOSOPHY
PR: Graduate standing or Cl. A detailed study of the philosophical theories of society, class societies (Capitalism), advanced technocracy, (all types). This course may be taken more than once for credit with CI and departmental approval. Seminar format.

PHM 6305 SEMINAR IN POLITICAL PHILOSOPHY
Graduate standing or Cl. An examination of the main political philosophies. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

PHM 6406 SEMINAR IN THE PHILOSOPHY OF LAW
PR: Graduate standing or Cl. A study of the metaphysical, ethical and epistemological bases of law. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

PHM 6506 SEMINAR IN PHILOSOPHY OF HISTORY
PR: Graduate standing or Cl. The analysis of language and logic of historical explanation, historical idealism, historic materialism, positivism, and historical sociology. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

RELIGIOUS STUDIES
Chairperson: W.C. Tremmel; Coordinator of Ancient Studies, A.M. Gessman; Professor: A.M. Gessman, W.C. Tremmel, J.F. Strange; Associate Professor: W.M. Shea; Assistant Professors: D.J. Fasching M.G. Mitchell; Visiting Instructors: R. Akers, R. DeHainaut, R. Giannini, C. Kilgore, F.N. Sundheim; Other Faculty: J.S. Hatcher, E.E. Smith.
**UNDERGRADUATE COURSES**

**GRE 3400 NEW TESTAMENT GREEK I**

**GRE 3401 NEW TESTAMENT GREEK II**

**REL 3000 INTRODUCTION TO RELIGION**
This course examines the phenomenon of religion to answer the question: Religion—what is it? Religious thought (mythology and theology) and religious behavior (ritual and morality) are closely examined.

**REL 3120 RELIGION IN AMERICA**
To examine the movement from state church to pluralism in American religious institutions, the religious results of non-Protestant immigration; the Jewish factor; the effect of home missions and social concern programs on American life; political entanglements and the concept of church/state separation.

**REL 3131 NEW RELIGIONS IN AMERICA**
A course designed to allow the student to survey the wide spectrum of contemporary sects and cults and learn what motivates their development.

**REL 3145 WOMEN AND RELIGION**
Analysis of the status and roles of women as compared to men in the Judeo-Christian tradition. Contemporary issues of feminist theology, and the controversies surrounding them. (May also be taken for credit in Women's Studies.)

**REL 3172 RELIGION, ETHICS AND SOCIETY**
Explores the relations between religion, ethics, and society in Eastern and Western cultures, and the critical problems raised by the emergence of modern, secularized civilization. Open to majors and non-majors.

**REL 3201 LAND OF THE BIBLE**
A survey of the natural features, historical forces, and cultural movements of the Holy Land that shaped its peculiar role in history with respect to the ancient Hebrews. Particular attention will be paid to the period from the Hebrew Conquest to time of Jesus.

**REL 3210 INTRODUCTION TO THE BIBLE/OLD TESTAMENT**
An introduction to the critical study of the Hebrew Scriptures against the background of the ancient Near East, with attention to the history and religion of the Hebrew people. REL 3210 and REL 4221 may not both be credited toward the major.

**REL 3243 INTRODUCTION TO THE NEW TESTAMENT**
An introduction to the critical study of the New Testament in context of Christian beginnings in the first century A.D. REL 3243 and REL 4244 may not both be credited toward the major.

**REL 3280 BIBLICAL ARCHAEOLOGY**
An examination in depth of the archaeological data relating to the background and content of the Bible, including ancient archaeology, Biblical sites and cities, Biblical history, and material culture of the Biblical period. Special attention will also be given to excavation methods and interpretation of archaeological evidence.

**REL 3310 WORLD RELIGIONS**
An introduction to and a comparison of the ideas, the literature and institutions of the major religions of the world including Judaism, Christianity, Islam from the Near East and Hinduism, Taoism, Confucianism, and Buddhism from the Far East. General comparison of Western and Eastern beliefs.

**REL 3332 BUDDHISM**
The study and comparison of Theravada and Mahayana Buddhism in their philosophical and psychological dimensions.

**REL 3335 RELIGIONS OF CHINA AND JAPAN**
This course will investigate the philosophy of ancient China and its two major interpreters, Lao Tzu and Confucius. It will also look at the native Japanese Shinto religion.

**REL 3342 THE RELIGIONS OF INDIA**
The sources of Hindu philosophic thought, and understanding of the psychology of the Yogas, and a study of the Hindu holy men and women are the three main concerns of this course.

**REL 3420 CONTEMPORARY RELIGIOUS THOUGHT**
A continuation of the general ideas of recent theological thinkers; such men as Barth, Brunner, Bultmann, Bonhoeffer, Rahner, Tillich, Cox, Altizer, Buber, Niebuhr.

**REL 3501 HISTORY OF CHRISTIANITY**
The historical development of Christianity, its ideas and institutions, from the first century to the rise of "religious modernism" in the 19th century.

**REL 3600 INTRODUCTION TO JUDAISM**
An introduction to Judaism: its religious tenets; its codes of ethics; its rites and customs. This course is intended as a description of what it means to be a Jew.

**REL 3612 HISTORY OF JUDAISM II**
A study of the history of Judaism and the Jews from the third century of our era through the Middle Ages to the Emancipation in the 19th century. Taking History of Judaism I first is advantageous.

**REL 3613 MODERN JUDAISM**
A study of Jewish life in the West since 1789, emphasizing Jewish beliefs, practices, and institutions.

**REL 3900 DIRECTED READINGS**
PR: CI. Individual guidance in concentrated reading on a selected topic.

**REL 3936 SELECTED TOPICS**
PR: CI. Course contents depend on students' needs.

**REL 4158 RELIGION AND DEPTH PSYCHOLOGY**
PR: One psychology course or CI. This course is designed to enhance the student's understanding of human existence by investigating the interrelationship between human dynamics and religion.

**REL 4171 CONTEMPORARY CHRISTIAN ETHICS**
PR: Jr. standing or CI. This course will survey several major approaches to contemporary Christian ethics and their application to a number of ethical issues peculiar to personal and social life in contemporary society. Open to majors and non-majors.

**REL 4182 COMPARATIVE MYSTICISM**
A course designed to acquaint the student with the nature of mystical experience, and some of the varieties of mystical experience recorded in the writings of the major religious traditions.

**REL 4191 RELIGION, TECHNOLOGY AND SOCIETY**
An exploration of the way in which religion and technology have interacted in Western civilization so as to both express and transform human values and identity. Special emphasis will be given to the values raised by modern technology. Open to majors and non-majors.

**REL 4192 RELIGION, SCIENCE AND SOCIETY**
This course will explore the religious roots of science and the history of its emancipation. Special emphasis will be given to the interaction of religion and science in contemporary society. Open to majors and non-majors.

**REL 4221 BIBLE I: OLD TESTAMENT LAW AND HISTORY**
An examination of the Pentateuch (Torah) from the point of view of its literary development, religious traditions, historical background, law, covenant theology, and the history of the religion of Israel.

**REL 4224 BIBLE II: PROPHETS, WRITINGS**
PR: REL 3210 or REL 4221 or CI. An investigation of the prophetic movement and the historical and cultic writings in Israel from the point of view of theological developments, history presupposed, and the religious institutions depicted. Special attention is given to a theme such as Job and the problem of evil.

**REL 4235 APOCRYPHA AND PSEUDEPIGRAPHA**
A critical study of the books written "between the Testaments", a few of which (the Apocrypha) are sometimes regarded as canonical by some groups, but most of which (the Pseudepigrapha) are not. Special attention will be paid to the role of these books in the development of early Christianity and post-Biblical Judaism.

**REL 4244 NEW TESTAMENT I: GOSPELS, ACTS**
An exploration of the Gospels and Acts, including their backgrounds in Judaism and pagan religions, biblical, and form criticism, historical Jesus, and the social history of earliest Christianity.

**REL 4250 JESUS' LIFE AND TEACHINGS**
PR: CI. An examination of the various historical studies made in the quest of identifying Jesus as an historical figure. The concern is to make a reasonable assessment of who Jesus was and what he was saying to the Jews in Palestine at the beginning of the common era.

**REL 4252 NEW TESTAMENT II: THE LETTERS OF PAUL AND OTHER NEW TESTAMENT WRITINGS**
PR: REL 4244 or REL 3243 or CI. An investigation of the phenomenon of earliest Christianity in its Pauline and non-Pauline forms, particularly as reflected in Paul's letters and in other writings of the New Testament. Special attention is given to the program of Apocalyptic, as in the book of Revelation.
<table>
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<tr>
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<tbody>
<tr>
<td>REL 4295</td>
<td>DEAD SEA SCROLLS</td>
<td>(4) PR: CL. A survey and study of the literature of the Dead Sea Scrolls in original translation. Examination of the literary, historical, and archaeological evidence for the identification of the Qumran people with the Essenes. Possible connections with the New Testament and early Christianity.</td>
</tr>
<tr>
<td>REL 4508</td>
<td>MYTH TO CHRISTIANITY</td>
<td>(4) Study of the religions/mythologies of the ancient Middle East and Eastern Mediterranean and how their influences shaped the theology and practices of Christianity up to the end of the fourth century— influences, many of which continue to be evident in the traditional Roman and Eastern Orthodox churches.</td>
</tr>
<tr>
<td>REL 4670</td>
<td>JUDAISM AND CHRISTIANITY AFTER THE HOLOCAUST</td>
<td>(4) This course will explore the impact of the Holocaust on Jewish and Christian thought and identity in the light of the history of religious and cultural antisemitism in Western civilization. Open to majors and non-majors.</td>
</tr>
<tr>
<td>REL 4910</td>
<td>UNDERGRADUATE RESEARCH</td>
<td>(1-4) PR: Junior standing and CL. Individual investigations with faculty supervision.</td>
</tr>
<tr>
<td>REL 4931</td>
<td>SEMINAR IN RELIGION</td>
<td>(3) A course designed for persons, especially Religious Studies majors, whose prior religious studies have prepared them for a cooperative creative and/or research effort in the area of religion.</td>
</tr>
<tr>
<td>REL 4936</td>
<td>SELECTED TOPICS</td>
<td>(1-4) PR: Junior standing and CL. Individual investigations with faculty supervision.</td>
</tr>
<tr>
<td>REL 4939</td>
<td>THE DEVELOPMENT OF RELIGIOUS STUDIES</td>
<td>(3) Course designed for senior majors (and minors) in religious studies to complement REL 4931 (Senior Seminar). Discussion of key figures and methodological advances in the development of the field from the 18th century to present, with readings of classics in the development.</td>
</tr>
<tr>
<td>REL 5937</td>
<td>SELECTED TOPICS</td>
<td>(1-4) PR: Senior standing and CL. Course contents depend on students’ needs.</td>
</tr>
<tr>
<td>REL 6015</td>
<td>PROSEMINAR: THE GRADUATE STUDY OF RELIGION</td>
<td>(3) PR: Graduate standing in the Department of Religious Studies. An introduction to and research methods used in Religious Studies proper and those borrowed from other disciplines. In the former are to be found comparative religion, religious hermeneutics, and theological analysis. Among the latter are included comparative literature, literary criticism, and historical methods.</td>
</tr>
<tr>
<td>REL 6107</td>
<td>RELIGION AND THE HUMAN EXPERIENCE</td>
<td>(3) The study of religion with emphasis on the human experience through modern thinkers such as Tillich, Ricoeur, etc. May be retaken with different subject matter once.</td>
</tr>
<tr>
<td>REL 6126</td>
<td>RELIGION IN AMERICA</td>
<td>(3) Studies in the history of native American religions, of the rise of American denominations, churches, and sects, of the relationship between church and state, and of religious thought in America. May be retaken with different subject matter twice. Open to non-majors.</td>
</tr>
<tr>
<td>REL 6183</td>
<td>CLASSICS OF THE WESTERN MYSTICAL TRADITION</td>
<td>(3) An analysis of major works in spirituality in the medieval to modern periods in Christianity and Judaism. The attention is paid to the psychology of the mystical experience and the mystics' relationship to their community and tradition. Open to non-majors. May be retaken with different subject matter once.</td>
</tr>
<tr>
<td>REL 6184</td>
<td>COMPARATIVE MYSTICISM</td>
<td>(3) An in-depth study of different types of mystical consciousness, in the West and the East, medieval and modern.</td>
</tr>
<tr>
<td>REL 6285</td>
<td>STUDIES IN BIBLICAL ARCHAEOLOGY</td>
<td>(3) A study of various problems in Biblical Archaeology including excavation techniques, principles of interpretation, problems in correlation of the text of the Bible and specific finds, chronology, reconstruction of culture from archaeological evidence, and others.</td>
</tr>
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**GRADUATE COURSES**

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<tbody>
<tr>
<td>REL 6246</td>
<td>STUDIES IN THE GOSPELS</td>
<td>(3) An examination in detail of a select problem in Gospel research such as the Synoptic Problem, the social world of earliest Palestinian Christianity as inferred from the documents, life of Jesus research, or structural criticism of gospel narrative. May be retaken with different subject matter twice.</td>
</tr>
<tr>
<td>REL 6304</td>
<td>ANCIENT RELIGIONS AND LITERATURES</td>
<td>(3) A research seminar in some aspect of ancient religion and literature: Hebrew Bible, New Testament, Midrashism, Mystical Religions, Pseudepigrapha, and others taught in translation. May be retaken with different subject matter once.</td>
</tr>
<tr>
<td>REL 6317</td>
<td>STUDIES IN EASTERN RELIGIONS</td>
<td>(3) This course provides the student with sources and ideas for research in Oriental religions and with an interdisciplinary approach. May be retaken with different subject matter once.</td>
</tr>
<tr>
<td>REL 6327</td>
<td>SEMINAR: ANCIENT RELIGIONS AND LITERATURES</td>
<td>(3) A seminar in some aspect of ancient religion and literature: Hebrew Bible, New Testament, Midrashism, Mystical Religions, Pseudepigrapha, and others taught in translation. May be retaken with different subject matter three times.</td>
</tr>
</tbody>
</table>

**Ancient Studies Sequence**

**UNDERGRADUATE COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>CLA 3000</td>
<td>ANCIENT CIVILIZATIONS</td>
<td>(4) Study of the character, ideas, and cultural achievements of the peoples of the Ancient Middle East and Mediterranean and their relevance for modern Western civilization.</td>
</tr>
<tr>
<td>CLA 3801</td>
<td>HISTORY OF THE ALPHABET</td>
<td>(2) Study, in reasonable detail, of the evolution of our 'Roman' alphabet, as well as of other ancient and modern alphabets, from the writing system of ancient Egypt.</td>
</tr>
<tr>
<td>CLA 4100</td>
<td>GREEK CIVILIZATION</td>
<td>(3) Detailed study of the Athenian and Greek civilizations from their beginning in Crete and Mycenae to the Roman period. Greek discoveries, explorations, and colonization. (Alternate years.)</td>
</tr>
<tr>
<td>CLA 4120</td>
<td>ROMAN CIVILIZATION</td>
<td>(3) Prehistoric Italy and Etruscan civilization. History of the civilization of Rome and the Empire with emphasis on the Etruscan, Greek, Carthaginian, and Mid-Eastern influences. (Alternate years.)</td>
</tr>
</tbody>
</table>
CLA 4160 EGYPTIAN CIVILIZATION (3)
Study of the Ancient Egyptian civilization, including customs, religion, art and architecture, language and literature, and an introduction to hieroglyphic writing. (Alternate years.)

CLA 4171 MESOPOTAMIAN CIVILIZATION (3)
Study of the Ancient Mesopotamian (Sumero-Babylonian) civilization, including customs, religion, art and architecture, languages and literatures, science and the calendar, and an introduction to cuneiform writing. (Alternate years.)

CLA 4900 DIRECTED READINGS (1-4)
PR: Consent of coordinator prior to registration. Readings in special topics chosen by the student in cooperation with the instructor. Reading of literature also possible in English translation.

CLA 4930 SELECTED TOPICS (1-4)
Course contents depend on student demand and instructor's interest and may range over the whole field of Ancient languages, literatures, and civilizations. Offerings on a semi-regular basis include Tongues of the Bible (2), and the Bible as History (3).

HEB 3100, 3101 BASIC HEBREB I, II (4,4)
Designed to give students a working knowledge of Classical (Biblical) Hebrew and to introduce them to the Biblical literature in the original language.

HEB 4250, 4251 ADVANCED HEBREB I, II (4,4)
PR: HEB 3100, HEB 3101, or equivalent. Study and analysis of selected passages from pre-Exilic, Exilic, and post-Exilic Biblical and extra-Biblical Hebrew texts to the second century B.C.E. Survey of the Hebrew literature from its beginning to the end of the Second Commonwealth.

GRADUATE COURSES
The following entries are intended as service courses for students in related graduate programs, in particular Anthropology, History, and Linguistics. In all of these, permission from the coordinator is required prior to enrollment.

CLA 5900 DIRECTED READINGS (1-4)
Readings in special topics chosen by the student in cooperation with the instructor. Reading of literature also possible in English translation.

CLA 5910 INDIVIDUAL RESEARCH (1-4)
Specialized individual work in particular areas of student's interest.

CLA 5930 SELECTED TOPICS (1-4)
Course contents depend on student demand and instructor's interest and may range over the whole field of Ancient languages (including comparative studies), literatures, civilizations, and epigraphy.

NOTE: In any of the numbers CLA 4900, CLA 4930, CLA 5900, CLA 5910, CLA 5930, enrollment is repeatable for different subject matters.

COLLEGE OF BUSINESS ADMINISTRATION

ACCOUNTING/LAW


UNDERGRADUATE COURSES

ACG 2001 (formerly ACC 2001) FINANCIAL AND MANAGERIAL ACCOUNTING I (3)
Study of basic accounting principles including the recording and reporting of financial activity. The preparation and interpretation of financial statements.

ACG 2011 (formerly ACC 2021) FINANCIAL AND MANAGERIAL ACCOUNTING II (3)

ACG 3102 (formerly ACC 3101) INTERMEDIATE ACCOUNTING I (4)
PR: ACG 2011. Measurement theory and methodology underlying income measurement and reporting of financial position. The study of compound interest fundamentals, cash, temporary investment, receivables, inventories, property and equipment, intangibles, and long term investments.

ACG 3112 (formerly ACC 3121) INTERMEDIATE ACCOUNTING II (4)
PR: ACG 3102. Continuation of theory and principles underlying financial statements: current and long term liabilities, stockholders' equity, earnings-per-share, income taxes, pensions, leases, accounting changes, inflation, the statement of changes in financial position.

ACG 3301 MANAGERIAL ACCOUNTING (3)
PR: ACG 3112. The study of the uses of accounting data internally by managers in planning and controlling the affairs of organizations, both profit oriented as well as not-for-profit oriented entities. Non-Accounting majors only.

ACG 3361 (formerly ACC 3401) COST ACCOUNTING AND CONTROL I (3)

ACG 3401 (formerly ACC 3730) ACCOUNTING INFORMATION SYSTEMS (3)
PR: ACG 3102, and COC 2201. Manual and computer-based accounting systems, including order processing, accounts receivable, inventory management, and responsibility accounting systems. Emphasis on internal control, efficiency, and provision of useful information.

ACG 4461 (formerly ACC 4401) AUDITING (3)
PR: ACG 3112 and GEB 3121. Principles and procedures of internal and public auditing. The ethics, responsibilities, standards, and reports of professional auditing.

ACG 4901 (formerly ACC 4901) INDEPENDENT STUDY (1-3)
PR: CI. Specialized independent study determined by the students' needs and interests. May be repeated up to 6 credit hours. (S/U only.)

ACG 4911 (formerly ACC 4914) INDEPENDENT RESEARCH (1-4)
PR: CI. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor. May be repeated up to 8 hours.

ACG 4931 (formerly ACC 4934) SELECTED TOPICS IN ACCOUNTING (1-4)
PR: CI. The course content will depend on student demand and instructor's interest.

TAX 4001 (formerly ACC 4501) FEDERAL TAXES I (3)
PR: ACG 2011. An introduction to the federal income tax structure. Use of tax services and the concept of taxable income primarily applicable to individuals.

TAX 4011 (formerly ACC 4521) FEDERAL TAXES II (3)
PR: TAX 4001. Continued study of the federal income tax structure. Special topics and the concept of taxable income as it applies primarily to business enterprises.

GRADUATE COURSES

ACG 5205 (formerly ACC 5211) ADVANCED ACCOUNTING (4)
PR: ACG 3112. Accounting for business combinations, preparation of consolidated financial statements, home office and branch operations, accounting for international operations and partnership.

ACG 5325 (formerly ACC 5315) FINANCIAL/MANAGERIAL ACCOUNTING (3)
This course provides students in the M.S. degree in Management with a basic knowledge of financial and managerial accounting in both the
public and private sectors. The course concentrates on the uses and limitations of accounting data for planning, control, and other decision making activities.

ACG 5505 (formerly ACC 5866) NONPROFIT ORGANIZATION ACCOUNTING

ACG 5805 (formerly ACC 5805) CONTEMPORARY ACCOUNTING THOUGHT
PR: Intermediate Accounting II or equivalent. An in-depth coverage of selected topics in accounting. Emphasis is placed on current significant developments that have taken place in the profession which the student should have for a well-rounded background in accounting but have not been exposed to in previous courses. Available to majors and non-majors.

ACG 5935 (formerly ACC 5935) SELECTED TOPICS IN ACCOUNTING
PR: CI. To allow advanced undergraduate students and graduate students to research and study contemporary and emerging topics in the field. May be repeated up to 6 credit hours.

ACG 6308 (formerly ACG 6412) MANAGEMENT ACCOUNTING AND CONTROL
PR: ACG 6705. The relevancy and limitation of cost information in: (1) planning and controlling current operations; (2) special decisions and long-range planning; (3) inventory valuation and income determination. Not available for credit for graduate students in the Master of Management program.

ACG 6346 (formerly ACC 6451) MANAGEMENT ACCOUNTING AND CONTROL
PR: 20 semester hours of accounting or CI. Measurement, interpretation, planning, and control of costs by means of predetermined standards, and variance analysis. Use of accounting and statistical information in preparing budgets and controlling operations.

ACG 6405 (formerly ACC 6415) SYSTEMS THEORY AND QUANTITATIVE APPLICATIONS
PR: ACG 3401 or equivalent. The design and operation of contemporary accounting systems including the relevance of data processing and statistical methods to the system of financial information and control.

ACG 6656 (formerly ACC 6691) CONTEMPORARY ISSUES IN AUDITING
PR: ACG 4651. This course is designed to discuss and illustrate the professional pronouncements that govern the professional practice of Auditing practice and emerging issues related to the field of Auditing are considered.

ACG 6675 (formerly ACC 6811) DEVELOPMENT OF ACCOUNTING THOUGHT
PR: 20 semester hours of accounting or CI. A study and evaluation of the development and evolution of current accounting theory and measurement concepts. The definition of accounting objectives and goals and the development of measurement models.

ACG 6905 (formerly ACC 6905) INDEPENDENT STUDY (Var.) Independent Study in which student must have a contract with an instructor. Repeatable (S/U only.)

ACG 6915 (formerly ACC 6910) DIRECTED RESEARCH (Var.)
PR: GR. Master's level. Repeatable. (S/U only.)

ACG 6936 (formerly ACC 6930) SELECTED TOPICS IN ACCOUNTING
PR: CC. The course content will depend on student demand and instructor's interest. May be repeated up to 6 hours.

TAX 6065 (formerly ACC 6511) FEDERAL TAX RESEARCH AND PLANNING
PR: TAX 4001 or CI. A study of the development of tax law and its implication in business decisions. Tax planning and tax research are emphasized.

COMMON BODY OF KNOWLEDGE

GRADUATE COURSES

GEB 6705 FINANCIAL ACCOUNTING FOR MANAGERS
PR: Graduate standing. Study of (1) accounting concepts and standards applicable to presentation of financial information to interested users, (2) structure, uses and limitations of financial statements and (3) measurement systems related to income determination and asset valuation. Discussion of internal and external influences on accounting decisions.

GEB 6716 MICROECONOMIC ANALYSIS
PR: Graduate standing. Study of the theories of economic behavior in the market system and an appreciation of the role of economic organizations in achieving private and social goals. Topics covered: consumer behavior, demand analysis, factor markets, theories of production and cost.

GEB 6717 MACROECONOMIC ANALYSIS
PR: GEB 6716. A study of the interaction of aggregate demand and supply in the determination of output, employment, prices, wages, and interest rates.

GEB 6725 FINANCIAL MANAGEMENT
PR: GEB 6705 or its equivalent. The study of processes, the decision structures, and the institutional arrangements concerned with the utilization and acquisition of funds by a firm. The course will include the management of the asset structure and the liability structure of the firm under both certain and risky situations and considering the problems of time and the decision makers preferences. The financial decision processes will include and recognize the international as well as domestic aspects of financial management.

GEB 6735 SOCIAL, LEGAL, AND POLITICAL ENVIRONMENT OF BUSINESS
PR: 12 hours of MBA Foundation Courses. A study of the influence of social, cultural, legal, and political environment of institutional behavior, including the changing nature of the business system, the public policy process, corporate power, legitimacy and managerial autonomy, and organizational reactions to environmental forces.

GEB 6745 MARKETING MANAGEMENT
PR: GEB 6716. Analysis of operational and strategic planning problems confronting marketing managers. Topics include buyer behavior, market segmentation, information systems, product selection and development, pricing, distribution, promotion and sales force management.

GEB 6756 STATISTICAL METHODS FOR MANAGEMENT
PR: College algebra. A study of probability and statistics as applied to administrative problems of choice estimation and prediction under conditions of uncertainty.

GEB 6757 QUANTITATIVE METHODS FOR OPERATIONS MANAGEMENT
PR: Graduate standing, college algebra. The study and application of management science techniques to problems in resource allocation, scheduling, inventory control, etc.

GEB 6775 INFORMATION SYSTEMS FOR MANAGEMENT
PR: Graduate standing. A study of the analysis and application of management information systems; the impact of computers on decision making; the utilization of computer languages, statistical packages, research and business analysis.

GEB 6836 THE MANAGEMENT PROCESS
PR: Graduate standing. An examination of the theory and practice of management, including the study of goals and means, the functions of management, and the administrative processes in general.

GEB 6895 BUSINESS POLICY AND STRATEGY
PR: Capstone course to be taken in final semester of program. Advanced study of business decision-making processes under conditions of risk and uncertainty, including integrating analysis and policy formation at the general management level.

ECONOMICS


UNDERGRADUATE COURSES

ECO 2013 ECONOMIC PRINCIPLES (MACROECONOMICS)
PR: ECO 2023. Introduction to the theory of income determination with emphasis on applications of monetary and fiscal policies. Topics discussed are: objectives of full employment, price stability, economic growth, and balance of payments stability.
ECO 2023 ECONOMIC PRINCIPLES (MICROECONOMICS) (3)
Fundamental economic concept of scarcity, and the problem of choice. How an economy decides what to produce, how to produce and how to distribute goods and services to participants in the economy. Attention is focused on factors affecting consumer wants and on the determination of prices in markets.

ECO 3101 INTERMEDIATE PRICE THEORY (3)
PR: ECO 2023. Analysis of supply and demand as related to product and resource pricing under the various market structures.

ECO 3203 INTERMEDIATE INCOME & MONETARY ANALYSIS (3)
PR: ECO 2013 and ECO 3101. Analysis of the determination of income, employment, prices, and interest rates. Emphasis is placed on the interaction of aggregate demand and aggregate supply.

ECO 3622 AMERICAN ECONOMIC HISTORY (3)
PR: ECO 2023. The growth and evolution of American economic institutions from Colonial times to the present.

ECO 3703 INTERNATIONAL ECONOMICS (3)

ECO 4213 MONETARY THEORY (3)
PR: ECO 3203. Examination of the impact of the financial sector, real and nominal economic magnitudes. The course approaches its subject matter through the theory of portfolio and capital adjustments.

ECO 4246 THEORY OF ECONOMIC DYNAMICS (3)
PR: ECO 3203. Examination of macroeconomic processes as they occur through time. The determination and characteristics of long run growth paths based on both Keynesian and Neoclassical models are discussed. Empirical studies, forecasting, and policy issues are also considered.

ECO 4303 HISTORY OF ECONOMIC THOUGHT (3)
PR: ECO 3101, or CI. The development of economic schools of thought, from Plato to Marshall, are traced and analyzed. The impact of historical and political conditions will be stressed.

ECO 4323 MARXIST POLITICAL ECONOMY (3)
PR: ECO 2013, or Cl. An examination of the Marxist school of thought in economics. Application of Marxist economic theory to problems of advanced capitalist and socialist societies.

ECO 4401 INTRODUCTION TO MATHEMATICAL ECONOMICS (3)
PR: ECO 2013, and GEB 3121, MAC 2243 or CI. Economic processes expressed as equations and economic systems as mathematical models. Investigation of static and dynamics properties by mathematical analysis and computer simulation.

ECO 4402 SELECTED TOPICS IN QUANTITATIVE ECONOMICS (3)
PR: Cl. Analysis of relevant problems of social policy by application of economic criteria and econometric method. Survey of contemporary research.

ECO 4504 PUBLIC FINANCE (3)

ECO 4723 INTERNATIONAL COMMERCIAL POLICIES (3)
PR: ECO 3101. Advanced analysis of international trade theory and commercial policy, international economic integration, and multinational enterprise.

ECO 4905 INDEPENDENT STUDY (1-3)
PR: Cl. Specialized independent study determined by the student's needs and interests. May be repeated up to 6 credit hours. (S/U only.)

ECO 4914 INDEPENDENT RESEARCH (1-3)
PR: Cl. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor. May be repeated up to 6 hours.

ECO 4935 SELECTED TOPICS IN ECONOMICS (1-3)
PR: Cl. Topics to be selected by the instructor or instructors on pertinent economic issues.

ECO 5003 BUSINESS-GOVERNMENT RELATIONSHIPS (3)
PR: ECO 2013. Analysis of the three public policy approaches: competitive, regulatory, and ownership; in terms of ability to bring about economically desirable price-cost relationships, reductions in cost, invention and innovation and an optimal allocation of resources.

ECP 3203 LABOR ECONOMICS (3)
PR: ECO 3101 or Cl. History of the trade union movement; economic analysis of trade union philosophies and practices; examination of basic influences affecting labor force, real wages, and employment; collective bargaining and labor law.

ECP 3433 ECONOMICS OF TRANSPORTATION (3)
PR: ECO 2013 and ECO 2023. Functions of transportation agencies, rate structure of transportation companies, problems of state and federal regulations and coordination of transportation facilities.

ECP 3613 ECONOMICS OF THE URBAN ENVIRONMENT (3)
PR: ECO 2013 and ECO 2023. Economic analysis of the phenomena of cities as well as urban social problems including poverty, discrimination, housing, transportation, pollution, crime and fiscal considerations.

ECP 4232 COLLECTIVE BARGAINING AND PUBLIC POLICY (3)
PR: ECO 2023 or Cl. Administration of labor management agreements, etc. Impact of the government role in collective bargaining and labor relations will be examined in light of current labor laws and judicial interpretations.

ECS 3013 ECONOMIC DEVELOPMENT (3)
PR: ECO 2013 or Cl. Problems, policies, and dynamics of economic development in emerging nations. Benefits and relevance of theories of economic development is examined within the context of the social and political milieu of today's underdeveloped areas.

ECS 4003 COMPARATIVE ECONOMIC SYSTEMS (3)
PR: ECO 2013 or Cl. Analysis of the major types of economic systems: traditional, capitalism, democratic socialism, communism and fascism. The methodology of Max Weber will be stressed.

GEB 2111 BUSINESS AND ECONOMIC STATISTICS I (3)
PR: MAC 2243. Description of sample data; calculation of probabilities, frequency functions of random variables; the binomial and normal distributions; sampling theory and estimation; test of hypotheses; elements of Bayesian decision theory.

GEB 3121 BUSINESS AND ECONOMIC STATISTICS II (3)
PR: MAC 2243, GEB 2111. Theory and use of statistical inference. Point and interval estimation; criteria for choosing estimators and decision rules; hypotheses tests; analysis of variance, correlation and regression.

GRADUATE COURSES

ECO 5404 ECONOMIC PROGRAMMING AND CONTROL (3)

ECO 5424 ECONOMETRICS I (3)
PR: ECO 3203 or GEB 6717 and GEB 3121 or GEB 6756, or Cl. Theory and use of multiple regression to estimate relationships in causal models, to analyze economic behavior and to forecast the outcome of economic disturbances. Use of standard software packages. Estimation and interpretation of regression equations.

ECO 5425 ECONOMETRICS II (3)
PR: ECO 5424. Advanced econometric techniques; model building, estimation and forecasting, design and execution of individual research projects.

ECO 6115 MICROECONOMICS (3)
PR: ECO 3101 or GEB 6716. Advanced analysis of microeconomic behavior of consumers, producers, and resource suppliers. Topics covered: general concept of scarcity, conceptual models of demand, production, cost, and the firm and market organization.

ECO 6206 AGGREGATE ECONOMICS (3)
PR: ECO 3203 or GEB 6717. Advanced analysis of macroeconomic interrelationships determining the level of income, employment, prices, interest rates and economic growth rates as well as the impact of government policy upon these variables.

ECO 6216 MONETARY THEORY (3)
PR: ECO 3203 or GEB 6717. Advanced discussion of the impact of the financial sector upon real and nominal economic magnitudes. The course emphasizes theoretical and empirical contributions found in the current literature as an extension of earlier work done in the field of monetary theory.
PR: ECO 6115 or GEB 6716 and GEB 6756. Advanced study of decision-making in households, firms and not-for-profit institutions. Topics cover demand, production and cost, organizational goals, and efficiency vs. effectiveness.

FINANCE


UNDERGRADUATE COURSES

FIN 2100 PERSONAL FINANCE
Survey of the problems and techniques of personal financial planning. Includes consumer credit, insurance, home ownership, and personal investment, with attention given to current economic and legal constraints. Not available for credit to upper level students who have been admitted to the College of Business Administration.

FIN 2105 INTRODUCTION TO INVESTMENTS
Emphasizes the operations of the security markets in the U.S. and the risks and returns of alternative investment media. Designed for non-business administration students. Not available for credit to upper level students who have been admitted to the College of Business Administration.

FIN 3233 MONEY AND BANKING
PR: ECO 2013. Examines the structure and operations of our monetary system, commercial banking, central banking, money, and capital markets, and provides an introduction to monetary theory and policy.

FIN 3403 PRINCIPLES OF FINANCE
PR: ECO 2011 and ECO 2022. Study of the processes, decisions, structures, and institutional arrangements concerned with the use and acquisition of funds by a firm. Includes the management of the asset and liability structure of the firm under certain and risky situations. The financial decision process will include and recognize the international as well as domestic aspects of financial management.

FIN 3604 INTERNATIONAL FINANCE
PR: ECO 2013 or Cl. Study of factors affecting international business, assessment of risks, international managerial finance; institutions and instruments of international business finance.

FIN 4303 FINANCIAL INSTITUTIONS
PR: FIN 3233. A study of financial institutions and their roles in the capital market includes the savings allocation, investment, and financial decision making processes.

FIN 4414 ADVANCED CORPORATION FINANCE
PR: FIN 3403. An examination of the financial policies of corporations, with special reference to dividend policy, financial structure, capital expenditures, acquisitions, mergers, and reorganization.

FIN 4443 FINANCIAL POLICIES AND STRATEGIES
PR: FIN 4414. A senior seminar for majors in Finance. Primarily a case course examining financial policies and the application of financial analysis to alternative strategies.

FIN 4504 PRINCIPLES OF INVESTMENTS
PR: ECO 2013 and FIN 3403. Survey of the risks and returns of investment media in relation to the investment objectives of individual and institutional investors. Includes an examination of the capital markets, information flows, and analytical techniques in terms of their impact upon the valuation process.

FIN 4524 ADVANCED INVESTMENT ANALYSIS AND MANAGEMENT
PR: FIN 4504. A comprehensive survey of security analysis and portfolio management. The course will utilize a quantitative approach to investment selection and management.

FIN 4834 FEDERAL RESERVE SYSTEM AND MONETARY POLICY
PR: FIN 3233 or Cl. An analysis of the Federal Reserve System, with special emphasis on monetary theory and the formulation and administration of monetary policy.

FIN 4905 INDEPENDENT STUDY
PR: Cl. Specialized independent study determined by the students' needs and interests. May be repeated up to six credit hours. (S/U only.)
FIN 4915 INDEPENDENT RESEARCH
PR: CI. Individual study contract with instructor and department, chairperson. The research project will be mutually determined by the student and instructor. May be repeated up to 6 hours.

FIN 4934 SELECTED TOPICS IN FINANCE
PR: CI. Topics to be selected by instructor and department chairperson on pertinent Finance issues.

REE 3040 PRINCIPLES OF REAL ESTATE
Economics of urban land utilization and the nature of property rights. Problems of urban development and the valuation of real property in terms of the structure and operations of the real estate market.

REE 4100 REAL ESTATE APPRAISAL
Comprehensive coverage of the basic concepts and principles of real estate appraisal. Emphasis placed on the use of valuation tools for the appraisal of real estate with emphasis on residential property.

REE 4691 REAL ESTATE FINANCE
PR: REE 4310. A comprehensive analysis of the institutional and legal framework of real estate financing together with an introduction to the financing techniques which are traditionally utilized to finance real estate. Includes methods of raising debt and equity funds. Analysis of real property for financing purposes is stressed in a decision-making context and how that decision affects the real estate investment.

REE 4310 REAL ESTATE INVESTMENT ANALYSIS
PR: FIN 3403, REE 3040. A comprehensive study of the determinants of the market and financial feasibility of the real estate investment decision. The development of market and site analyses, theories or urban development patterns, and the role of taxation will be studied along with the application of analytical techniques for decision making. The course is not restricted to Finance majors.

RMI 3010 PRINCIPLES OF INSURANCE
Analysis of insurable risks of both business and individuals. An examination of the characteristics of those areas of risk and uncertainty where the mechanisms of insurance are effective alternatives. The concept, contracts, and institutions involved in insurance are examined in relationship to the socio-economic environment.

RMI 4110 LIFE, HEALTH, AND DISABILITY INSURANCE
PR: GEB 3121, RMI 3010. The course will analyze the use of life, health, and disability insurance contracts as a method of dealing with the risks of death, sickness, and disability. It also will include an analysis of cost determination of the various types of coverage.

RMI 4113 CASUALTY INSURANCE
PR: RMI 3010. Course dealing with recognition of personal and business casualty risks and coverages which may be used in dealing with these risks. Considers the underwriting, marketing, and social problems associated with these coverages. Topics include workmen's compensation, public liability, auto liability, suretyship and crime insurance. Not limited to Finance majors.

RMI 4210 PROPERTY INSURANCE
PR: RMI 3010. Course dealing with recognition of personal and business property risks and coverages which may be used in dealing with these risks. Considers the underwriting, marketing, and social problems associated with these coverages. Topics include commercial and residential fire insurance, inland marine and transportation coverages, and mult peril contracts. Not limited to Finance majors.

GRADUATE COURSES

FIN 6246 ADVANCED MONEY AND CAPITAL MARKETS
PR: Macroeconomic Analysis or equivalent. The study of the role of financial markets in the economy. The course will investigate and analyze the effects of relationship between financial theory, financial institutions, and financial markets and their interactions and impacts on the economy. It includes the study of flow of funds, interest rate determination, and the pricing of capital assets.

FIN 6375 FINANCIAL PLANNING FOR HEALTH ORGANIZATIONS
PR: Financial/Managerial Accounting. An examination of tools and techniques of financial management in the administration of Health Care Organizations. Cannot be taken for credit by students who have taken GEB 6725.

FIN 6446 FINANCIAL POLICY
PR: GEB 6725 or CI. A case study approach to financial policy and strategy with an emphasis on major financial decisions in the area of external financing, mergers, acquisitions, recapitalization, and reorganization.

FIN 6605 INTERNATIONAL FINANCIAL MANAGEMENT
PR: Financial Management or equivalent. The course provides a foundation for the understanding and appreciation of financial management of international business. The subject areas covered relate to: international finance, multinational business finance, and financial market theory.

FIN 6718 GOVERNMENTAL FINANCIAL PLANNING AND BUDGETING
PR: Basic understanding of accounting and CI. A thorough investigation of planning, budgeting, and control for government, including: Budgeting procedures and methods for services and capital improvements (e.g., zero base budgeting); estimating local revenues and expenditures; methods of financing capital facilities, debt financing and administration; measures of efficiency and effectiveness; and management of cash.

FIN 6804 THEORY OF FINANCE
PR: Financial Management or CI. A systematic and rigorous course in the theory of finance. Topics will include the theory of choice and the allocation of financial resources, the theory of optimal investment decisions, and the theory of risk and uncertainty in financial decisions. It will also cover the theoretical concepts underlying financing decisions and the cost of capital.

FIN 6816 INVESTMENTS
PR: Financial Management. An examination of the risks and returns of alternative investment media within the framework of various valuation models. Special attention is given to the investment process and the criteria for investment decisions.

FIN 6906 INDEPENDENT STUDY
PR: Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

FIN 6950 DIRECTED RESEARCH
PR: Graduate standing and CI. A variable credit course depending upon the scope and magnitude of the work required. Includes special lecture series.

GENERAL BUSINESS ADMINISTRATION

UNDERGRADUATE COURSES

BUL 2111 LAW AND THE INDIVIDUAL
A study of the nature, functions, sources, formulation, and administration of law with the special emphasis on the practical aspects of criminal, tort, estate, divorce, property, business, constitutional, and other areas of law. Not available for credit to students who have been admitted to the College of Business. (No credit for students with credit in BUL 3112.)

BUL 3112 BUSINESS LAW I
The nature of legal institutions, essentials of binding contract, remedies granted in event of breach of contract, and rights acquired by assignment of contracts.

BUL 3112 BUSINESS LAW II
PR: BUL 3112. Legal problems in marketing of goods, nature of property, sales of personal property, security of credit granted, nature and use of negotiable instruments.

BUL 3659 THE LAW OF BUSINESS ASSOCIATIONS
PR: BUL 3112. A study of the law of corporations, the law of partnerships, and the law of agency.

CSG 2201 COMPUTER BUSINESS
A study of the use and impact of computers in all areas of business organizations. Course includes hands-on experience and the use of software packages for business analysis.

GEB 3211 BUSINESS COMMUNICATIONS
Analysis and application of the principles of organizational behavior in letters, memorandums, and reports. Course is structured around a model which manifests the effective communications process.

GEB 3612 INFORMATION SYSTEMS: ANALYSIS AND DESIGN
PR: COC 2201. An advanced interdisciplinary examination of the impact of information systems on the business enterprise. Concepts of business systems analysis, information theory, transaction editing, file design, and update systems are developed.

GEB 4511 BUSINESS POLICY
PR: Senior standing. The course is intended to provide a unifying, integrating, and coordinating opportunity to tie together concepts, principles, and skills learned separately in other, more specialized
courses in Business Administration.

**GEB 4901 INDEPENDENT STUDY** (1-3)
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated up to eight credit hours. (S/U only.)

**GEB 4911 INDEPENDENT RESEARCH** (1-4)
PR: CI. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor. May be repeated up to 8 hours.

**GEB 4935 SELECTED TOPICS IN BUSINESS ADMINISTRATION** (1-4)
The content and organization of this course will vary according to the current interests of the faculty and needs of students.

**GRADUATE COURSES**

**BUL 5665 LAW AND THE ACCOUNTANT** (3)
PR: BUL 3112 or CI. A comprehensive study of commercial law as it affects the practice of accounting.

**GEB 6905 INDEPENDENT STUDY** (var.)
Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**GEB 6915 DIRECTED RESEARCH** (var.)
PR: GR. Master's level. Repeatable. (S/U only.)

**GEB 6971 THESIS: MASTER'S** (var.)
Repeatable. (S/U only.)

**MAN 5806 ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT COUNSELING** (1-3)
Small business management consulting to an on-going firm or development of a business plan for a new enterprise. Emphasis on developing consulting skills and recognizing implications of entrepreneurs' capabilities and attitudes for success.

**MAN 5925 CBA WORKSHOP** (1-4)
Professional application workshop in various areas of finance, marketing, economics, accounting, management. May be repeated when subjects differ.

**MAN 6721 INTEGRATIVE SEMINAR** (3)
PR: CC. The course is intended to provide a unifying, integrating, and coordinating opportunity to tie together concepts, principles, and skills learned separately in order, more specialized courses in Business Administration.

**MANAGEMENT**


**UNDERGRADUATE COURSES**

**MAN 2932 SELECTED TOPICS IN MANAGEMENT** (1-4)
PR: CI. Topics to be selected by department chairman. May be repeated if topics vary. Not available for credit to upper-level students who have been admitted to the College of Business Administration. May be repeated up to 8 credit hours.

**MAN 3025 PRINCIPLES OF MANAGEMENT** (3)
Study of the fundamentals of management. It treats topics in organizational theory, organizational behavior, and interpersonal relationships which are relevant to effective management performance.

**MAN 3150 ORGANIZATIONAL BEHAVIOR ANALYSIS** (3)
PR: MAN 3010. The course covers research literature relevant to organizational functioning including behavioral effects of power and authority, formal organization, structural variation, leadership, motivation, and communication.

**MAN 3301 PERSONNEL MANAGEMENT** (3)
To develop a broad exposure to new approaches, techniques, and future trends in the management of personnel. A study of the major functions in personnel including job analysis, manpower planning, selection, performance evaluation, training, and wage and salary administration.

**MAN 3401 INDUSTRIAL RELATIONS** (3)
A conceptualization of the administrative problems arising from unionization. Emphasis on the relationship between management and employee representatives in private and public employment. Required course for Management majors.

**MAN 3810 INTRODUCTION TO MANAGEMENT SCIENCE** (3)
A survey of management science techniques and their application to problems solving and decision making. Competency in college algebra is necessary. Required course for all business majors.

**MAN 4120L MANAGERIAL BEHAVIORAL LABORATORY** (3)
PR: MAN 3150 or equivalent. Development of direct understanding of personal, interpersonal, and intergroup factors present in organizational interaction. Stress is on a series of experiential exercises and written application of results within a laboratory setting.

**MAN 4130 ORGANIZATIONAL ASSESSMENT** (3)
PR: MAN 3150. The analysis and measurement of factors which influence organizational effectiveness and the quality of work life. Data based cases will be used by students to assess managerial and supervisory skills and to measure organizational functioning and work design.

**MAN 4210 ORGANIZATIONAL DEVELOPMENT AND CHANGE** (3)
PR: MAN 3150 or CI. This course should be taken simultaneously or after MAN 4201. A lab course where students experimentally apply behavioral science techniques in an "action-research" framework to the cycle of planned change so as to build a more effective organization.

**MAN 4400 THEORY AND PRACTICE OF MANAGEMENT SKILLS** (3)
Federal and state regulation of the employment relationship, including wage and hour laws; EEO; affirmative action programs; employee benefits; insurance; workers' compensation, safety, health, employee's personal rights; collective bargaining legislation.

**MAN 4430 SEMINAR IN NEGOTIATIONS AND ADMINISTRATION OF LABOR AGREEMENTS** (3)
Case studies in contract negotiation, administration, grievance settlement, and arbitration. Assumes familiarity with industrial relations system.

**MAN 4504 OPERATIONS MANAGEMENT: A SYSTEMS APPROACH** (3)
PR: MAN 3150 or equivalent. Deals with problems of "operations" in all kinds of enterprises in both the public and private sectors. Emphasis is placed on the application of various decision science methodologies to problem situation.

**MAN 4521 OPERATION—PRODUCTION SYSTEMS** (3)
PR: MAN 4504 or CI. Study of closed loop production planning and control systems. Master production planning, inventory management, materials requirements planning, capacity management, production activity control, relationship to organizational effectiveness.

**MAN 4802 ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT** (3)
PR: ACC 2001, ACC 2021, MAR 3023, or CI. Study of the factors involved in starting and managing a small to medium-sized business. Emphasis on conduct of pre-business feasibility study, start-up of business, successful management of the firm, and options for success upon termination.

**MAN 4804 SMALL BUSINESS MANAGEMENT COUNSELING** (3)
PR: MAN 4802 or CI. Field application in small business settings by (a) analyzing an on-going small business and developing recommendations for making improvements; or (b) conducting a feasibility study for a new enterprise and developing a strategy for implementation if favorable.

**MAN 4901 INDEPENDENT STUDY** (1-3)
PR: CI. Specialized independent study determined by the students needs and interests. May be repeated up to 8 credit hours. (S/U only.)

**MAN 4930 SELECTED TOPICS IN MANAGEMENT** (1-3)
PR: CI. Topics to be selected by instructor and department chairperson for pertinent Management issues.

**MAN 4931 INDEPENDENT RESEARCH** (1-4)
PR: CI. Individual study contract with instructor and department
chairperson required. The research project will be mutually determined by the student and instructor. May be repeated up to 8 hours.

QMB 4060 QUANTITATIVE APPROACH FOR BUSINESS DECISIONS (3)
PR: MAN 3810. The use of systematic approaches and management science tools for decision making and problem solving in an organizational setting. Emphasis is on quantitative approaches for problem identification, analysis, choice and implementation.

QMB 4703 SIMULATION AND MODELING TECHNIQUES (3)
PR: MAN 3810 or CI. A study of manual and computer simulation techniques and their application to problem solving in management (behavioral and quantitative). Knowledge of a computer language and the basic tools and techniques of management science is advised.

**GRADUATE COURSES**

MAN 5714 URBAN MANAGEMENT (3)
The applicability of business management theories and practices to problem solving in the public sector. A formal theory of organization is used to compare and contrast private and public sector decision environments.

MAN 6055 HUMAN RESOURCE MANAGEMENT (3)
Course focuses on the complex decision-making processes involved in the management of human resources within an organizational system geared to meeting both individual needs and organizational objectives.

MAN 6061 ORGANIZATIONAL THEORY AND MEASUREMENT (3)
PR: GEB 6836 or CI. The identification and measurement of variables which influence the effectiveness of public and private organizations including the assessment of managerial skills, organizational behavior, control systems, and work design.

MAN 6107 MANAGERIAL BEHAVIOR (3)
PR: GEB 6836 or CI. A laboratory approach to the understanding of patterns of interpersonal and inter-group behavior which are significant for the managerial role. Topics include perception, expectation, motivation, leadership styles, decision making, conflict and competition.

MAN 6135 MANAGEMENT OF COMMUNICATION (3)
Communication as management is the focus of this course. Examined are the process, nature, and variables which comprise organizational communications.

MAN 6157 MANAGEMENT OF PROFESSIONALS (3)
PR: GEB 6836 or CI. Organizational behavior of professional employees is investigated through available theories and concepts. Concentration is placed on the manager's role, especially that of matching organizational demands with individual talents and expectations.

MAN 6219 THE MANAGEMENT OF ORGANIZATIONAL DEVELOPMENT AND CHANGE (3)
PR: GEB 6836 or CI. This course should be taken simultaneously with or following MAN 6061. A combination laboratory-field course requiring the integration of behavioral science theories, tools, concepts, and techniques learned in the lab to an OB application in a "real" organization.

MAN 6405 LABOR RELATIONS LAW (3)
A survey of the various legal constraints applicable to the employer-employee relationship. Included are such areas as collective bargaining, civil rights, and fair labor standards. Also offered under Economics.

MAN 6409 LABOR-MANAGEMENT RELATIONS (3)
An examination of the historical, legal, and behavioral aspects of organizational conflict as well as methods of conflict resolution. Particular emphasis on collective bargaining and management of labor relations.

MAN 6559 QUANTITATIVE APPLICATIONS FOR MANAGEMENT DECISIONS (3)
PR: GEB 6756 and GEB 6757. The integration of quantitative approaches and management science tools into the decision making process at various organizational levels and in various organizational settings involved in the production and dissemination of goods and services.

MAN 6601 INTERNATIONAL MANAGEMENT (3)
PR: GEB 6846 or CI. A study of the characteristics of the international and multinational company, environmental constraints, personnel and labor relations factors, and strategic planning and policies.

MAN 6851 SIMULATION OF ADMINISTRATIVE SYSTEMS (3)
PR: GEB 6836. A study of manual and computer simulation techniques and their application to administrative problem solving. The course emphasizes model design and construction; data collection and analysis; model validation; and implementation problems.

MAN 6905 INDEPENDENT STUDY (var.)
Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

MAN 6901 DIRECTED RESEARCH (var.)
PR: Graduate, Master's level. Repeatable. (S/U only.)

MAN 6930 SELECTED TOPICS (1-4)
Designed to be taken either under general guidance of faculty member on some facet of management not offered in a regular course, or with regularly scheduled graduate courses for more in-depth study.

MAN 6971 THESIS: MASTER'S (var.)
Repeatable. (S/U only.)

**MARKETING**


**UNDERGRADUATE COURSES**

MAR 2391 SELECTED TOPICS IN MARKETING (1-4)
PR: CI. Topics to be selected by department chairman. May be repeated if topics vary. Not available for credit to upper-level students who have been admitted to the College of Business Administration. May be repeated up to 8 credit hours.

MAR 3023 BASIC MARKETING (3)
PR: ACB 2001, ECO 2013, ECO 2023, or CI. Survey of the marketing of goods and services within the economy. The integration of functional, commodity, and institutional approaches from the consumer and managerial viewpoints.

MAR 3613 MARKETING RESEARCH (3)
PR: GEB 3121, MAR 3023. A study of research methods and techniques applicable to problem solving in marketing. Attention is also given to defining information needs, determining the value of information, interpreting and reporting information for use in marketing decision making.

MAR 3722 MARKETING MANAGEMENT (3)
PR: MAR 3023. An applications oriented study of the marketing function at an intermediate level. Emphasis upon techniques for analysis and problem-solving. This course builds upon the principles and concepts learned in MAR 3023, and provides a strong foundation for the remaining courses in the marketing curriculum.

MAR 4153 RETAILING MANAGEMENT (3)
PR: MAR 3023. A comprehensive study of the retailing structure, institutions, and environment. Includes pertinent management theories and practices in analyzing, organizing, planning and controlling retail operations, both large and small.

MAR 4203 CHANNELS MANAGEMENT (3)
PR: MAR 3722. A detailed study of marketing channels as a functional area of marketing management responsibility and as a part of marketing strategy. Attention is given to wholesaling and retailing and their structural, dynamic interrelationships including distribution logistics.

MAR 4213 LOGISTICS AND PHYSICAL DISTRIBUTION MANAGEMENT (3)
PR: MAR 3722, MAN 3810, GEB 3121. A study of logistics in the marketing of goods and services. Includes a description and analysis of the logistics environment as well as components of the physical distribution system with emphasis on information flows and the application of quantitative techniques used in establishing and controlling customer service levels.

MAR 4243 INTERNATIONAL MARKETING (3)
PR: MAR 3722. A study of the procedures and problems associated with establishing marketing operations in foreign countries. Includes the institutions, principles and methods involved in the solution of these business problems as well as the effects of national differences on business practices and buyer behavior.
MAR 4343 PROMOTION MANAGEMENT (3)
PR: MAR 3722 or Cl. A study of the role of promotion in the marketing program of the firm, including the promotional tools available to the marketing manager and the various types of decisions made in the promotional area. The decision making process in development of a promotional program is emphasized.

MAR 4403 SALES MANAGEMENT (3)
PR: MAR 3722 or Cl. A study of sales management and strategy as a subset of marketing management. Emphasis is placed on developing the problem-solving and decision-making skills required of the sales manager in the modern market-oriented company.

MAR 4453 INDUSTRIAL MARKETING (3)
PR: MAR 3722. A study of the marketing of goods and services to the industrial and institutional sectors. Includes characteristics of the markets and channels of distribution, sales, management, research and promotional practices, marketing policies and strategies.

MAR 4503 BUYER BEHAVIOR (3)
PR: MAR 3613, MAR 3722. A study of the basic concepts and research procedures utilized in investigating pre- and post-purchase buyer behavioral patterns, with emphasis on the impact of various behavioral factors on a buyer's decision-making process. Includes managerial applications in a variety of marketing situations.

MAR 4713 MARKETING MANAGEMENT PROBLEMS (3)
PR: MAR 3722, MAR 3613 and two other 4000 level marketing courses or Cl. The integration of marketing knowledge applied to decision roles in managing the total marketing effort of firms, and coordination with other major functional areas on specific problems.

MAR 4903 INDEPENDENT RESEARCH (1-3)
PR: Cl. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor. May be repeated up to 6 credit hours.

MAR 4933 SELECTED TOPICS IN MARKETING (1-3)
PR: Cl. Topics to be selected by instructor and department chairperson.

GRADUATE COURSES
MAR 6216 LOGISTICS AND PHYSICAL DISTRIBUTION MANAGEMENT (3)
PR: GEB 6745, GEB 6756, GEB 6757, or Cl. A study of managerial methods focusing on the establishment and control of optimum customer service levels in the areas of inventory, transportation, fixed facility location, material handling, and information. Component parts of each system are analyzed quantitatively. Reading, lecture, case analysis.

MAR 6257 INTERNATIONAL MARKETING MANAGEMENT (3)
PR: GEB 6745. A study of marketing management activities from the perspective of firms doing business across national boundaries. Emphasis is upon aspects of marketing which are unique to international business, and upon problem-solving within an international context.

MAR 6346 PROMOTIONAL MANAGEMENT (3)
PR: GEB 6745. Management of the promotional function as part of the total marketing program. Includes a study of relevant buyer behavior concepts, resources and budgets, media, creative aspects, and effectiveness measurements as they relate to the management tasks of developing, implementing and evaluating promotional strategy.

MAR 6406 SALES MANAGEMENT (3)
PR: GEB 6745. A study of the sales function of the firm approached from the perspective of the sales manager. Emphasis is placed upon the development of the student's problem-solving, decision-making, and analytical skills.

MAR 6616 RESEARCH FOR MARKETING MANAGERS (3)
PR: GEB 6745, GEB 6756, GEB 6775. A study of marketing research methods and information systems and their relationship to marketing decision making. Topics include value and cost of information, sample design, questionnaire design, statistical analysis, and report presentation. Lecture, reading, case analysis, project.

MAR 6706 MARKETING STRATEGY (3)
PR: GEB 6745. A study of strategic marketing planning and problem-solving process as practiced by the modern market-oriented firm. The course is designed to develop marketing problem-solving, decision-making, and planning skills through the extensive use of case analysis.

MAR 6907 INDEPENDENT STUDY (var.)
Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

MAR 6916 DIRECTED RESEARCH (var.)
PR: GR. Master's level. Repeatable. (S/U only.)

MAR 6936 SELECTED TOPICS IN MARKETING (1-4)
PR: Cl. The content and organization of this course will vary according to the interests of the faculty and students involved in any given term. May be repeated when subjects differ.

COLLEGE OF EDUCATION

ADULT AND VOCATIONAL EDUCATION

ART EDUCATION
Chairperson: P. V. Czyzewski; Professor: R. L. Loveless; Associate Professors: H. C. Bryant, P. V. Czyzewski, J. B. Kase, B. J. Kazanis, A. Unruh.

CHILDHOOD/LANGUAGE ARTS/READING EDUCATION

CONTENT SPECIALIZATIONS

COUNSELOR EDUCATION
Chairperson: V. J. Drapela; Professors: W. K. Bott, V. J. Drapela, D. G. Ferguson, E. E. Panther; Associate Professor: C. M. Story.
EDUCATIONAL LEADERSHIP


EDUCATIONAL MEASUREMENT AND RESEARCH


ELECTIVE PHYSICAL EDUCATION

Chairperson: R. Heeschen; Professors: R. Heeschen, G. Hertz; Associate Professors: R. Grindey, H. A. Honker, A. Jonaitis, S. Prather, S. Taylor, J. Young; Assistant Professor: I. Trice.

LIBRARY, MEDIA, AND INFORMATION STUDIES


MUSIC EDUCATION

Chairperson: L. Cullison; Professors: V. A. Bridges, L. Cullison; Assistant Professor: C. Doane.

PROFESSIONAL PHYSICAL EDUCATION


PSYCHOLOGICAL AND SOCIAL FOUNDATIONS


SPECIAL EDUCATION


ADMINISTRATION AND SUPERVISION

GRADUATE COURSES

EDA 6016 ADMINISTRATIVE ANALYSIS AND CHANGE (3)
A competency based course on the application of function analysis, the Critical Incident technique and the Delphi technique to the identification, assignment, and evaluation of administrative tasks within selected organizational settings.

EDA 6232 SCHOOL LAW (3)
Basic essentials of school law. A review of court decisions affecting American education, with emphasis on Florida State Statutes.

EDA 6242 SCHOOL FINANCE (3)
PR: EDA 6061 or Cl. Financial support of public education by local, state, federal sources, with emphasis on Florida; introduction to educational budgeting.

EDA 6243 SCHOOL FISCAL RESOURCE ALLOCATION (3)
PR: Cl. Concepts and practices in allocation and accountability of financial resources in the schools. The use of systems concepts in school budgeting, including prioritizing of alternatives, PPBS and zero-based budget techniques, school-based management allocation models. Also available in workshop version.

EDA 6262 PLANNING EDUCATIONAL FACILITIES (3)
PR: Cl. Problems in the planning, construction, and use of educational facilities. Visitations and/or evaluation of selected schools.

EDA 6910 DIRECTED RESEARCH (var.)
PR: GR. Master's level. Repeatable. (S/U only.)

EDA 6931 CASE STUDIES IN SCHOOL ADMINISTRATION (3)
PR: EDA 6061 or Cl. Case studies to help prospective administrators understand administrative problems, propose feasible solutions, and evaluate courses of action. The course develops a skills in decision making.

EDA 6945 ADMINISTRATION PRACTICUM (3-8)
PR: Completion of a significant amount of the student's program. Field experiences in school systems for the purpose of identifying and analyzing educational problems. Application of concepts developed in the student's program to the solution of these problems.

EDA 7222 ADMINISTRATION OF SCHOOL PERSONNEL POLICIES AND PRACTICES (3)
PR: Certification in Administration/Supervision or Cl. Administration of school personnel policies and practices relating to professional staff, supporting staff, and students.

EDA 7233 LEGAL DIMENSIONS OF SCHOOL ADMINISTRATION (3)
PR: EDA 6232 or Cl. Historical perspective in law and education with in-depth reviews of case law showing the evolution of courts as educational policy makers.

EDA 7247 ADVANCED SCHOOL FINANCE (3)
PR: EDA 6242 or Cl. Advanced treatment of school finance. Development, implementation, and evaluation of financial resource and allocation systems. Emphasis is on intradistrict allocation.

EDA 6050 PRINCIPLES AND PRACTICES OF EDUCATIONAL SUPERVISION (3)
Principles and practices of instructional supervision including role definitions of supervision, analysis of role conflict, needs assessment, supervising the planning of instruction, and observing the delivery of instruction.

EDS 6131 CLINICAL SUPERVISION (3)
PR: Consent of Instructor. Designed to train administrators and supervisors in observing and diagnosing effective and ineffective teacher behavior in the classroom, prescribe alternative behavior in a formative mode and evaluate performance in a summative mode.

EDS 6239 PROBLEMS IN SUPERVISION (3)
PR: EDS 6050 or Cl. The analysis of instructional problems in schools. Emphasis of the course is directed to supervisory tasks, case studies, and the application of problem solving techniques and strategies.

EDS 7130 TEACHER EVALUATION: PROCESS AND INSTRUMENTS (3)
PR: Certification in Educational Administration/Supervision or Cl. Study of the development of teacher evaluation theory and the application of that theory to the practice of teacher evaluation.

ADULT EDUCATION

UNDERGRADUATE COURSES

ADE 4360 METHODS OF TEACHING: ADULT EDUCATION (3)
Methods, techniques, and materials for instruction.

ADE 4361 SPECIAL TEACHING METHODS: ADULT EDUCATION (4)
Methods, techniques, and materials for skill development.

ADE 4945 SUPERVISED FIELD EXPERIENCE: ADULT EDUCATION (1-6)
PR: CI. Planned supervised functions in the area of specialization and coordinated with selected schools, government, offices, social agencies, businesses and industries on site.

GRADUATE COURSES

ADE 5160 PROGRAM MANAGEMENT: ADULT EDUCATION (4)
This course examines the establishment of organizational climate and structure, assessing needs and interest, designing, operating and evaluating comprehensive adult programs.

ADE 5161 CURRICULUM CONSTRUCTION: ADULT EDUCATION (4)
Curriculum scope, the process of planning and organizing instructional programs with emphasis on task analysis and process evaluation.

ADE 5385 THE ADULT LEARNER (4)
The physiological and psychological changes in the adult life span and the implications which these changes have for adult learning capabilities. Significant research in adult learning is identified and analyzed.

ADE 6000 ADULT EDUCATION IN THE UNITED STATES (4)
PR: ADE 5385 or equivalent or CI. A study of the adult education movement in the United States from its beginnings to the present life long learning enterprise it has become. Economic and cultural factors of the past are examined with a view toward implications for the future.

ADE 6197 ADULT BASIC EDUCATION: ADULT EDUCATION (4)
An overview of adult basic education with emphasis on current issues and problems of curriculum and instruction in program development and emphasis on culturally different adults.

ADE 6380 ADMINISTRATION OF LOCAL PROGRAMS: ADULT EDUCATION (4)
A study of the organization, selection of personnel, assignment of duties and responsibilities, and establishment of policies and procedures to accomplish the objectives of the local program within the federal, state, and local requirements.

ADE 6387 SUPERVISION OF LOCAL PROGRAMS: ADULT EDUCATION (4)
A study of the factors involved in the supervision of instruction including plans for teacher education, improvement of instruction, coordination of activities, and personnel relations.

ADE 6946 PRACTICUM: ADULT EDUCATION (3-6)
A problem-centered study of the community, school, government, office, social agency, business or industry.

ADE 7185 COMMUNITY EDUCATION AND PROGRAM DEVELOPMENT (4)
Examines the sociological and economical forces affecting community education programs and activities. Also the concept of lifelong learning and its relationship to the development of community educational programs is examined.

ADE 7385 ADULT EDUCATION AND LEARNING (3)
PR: ADE 5385, or equivalent. This is an advanced in-depth study of the distinctive characteristics of adult life and adult learning.

PFP 6940 ADULT FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION PRACTICUM (3)
PR: PET 6369C. Practical experience in adult fitness testing, consultation and individualized exercise prescriptions. Practicums will be carried out in the USF adult fitness program and/or a area employee fitness, YMCA, private clinics and hospitals.

PET 6941 EXERCISE SCIENCE INTERNSHIP (8)
PR: Completion of all curriculum requirements and PET 6944. Open to Exercise Science graduate degree candidates only. Supervised performance in university, community college, or public and/or private adult fitness programs. Three months on site. (S/U only.)

PET 5387 (formerly PET 5379L) EXERCISE STRESS TESTING AND ELECTROCARDIOGRAPHY (3)
PR: CI. Linked with PET 5379L. Theoretical and laboratory concepts of cardiac response to exercise testing of healthy and cardio/pulmonary individuals. Includes exercise electrocardiography testing techniques and administration.

PET 5387L (formerly PET 5379L) EXERCISE STRESS TESTING AND ELECTROCARDIOGRAPHY LABORATORY (1)

PR: CI. Linked with PET 5379. Laboratory experiences and practice in conducting exercise stress tests.

PET 6355 (formerly PET 6366) ADVANCED EXERCISE PHYSIOLOGY (3)
PR: CI. Linked to PET 6366L. The study of exercise physiology including: ergometry, body composition, pulmonary function, energy metabolism, work capacity, cardiovascular hemodynamics, acute and chronic response to exercise.

PET 6355L (formerly PET 6366L) ADVANCED EXERCISE PHYSIOLOGY LABORATORY (1)
PR: CI. Linked with PET 6366. Provides laboratory learning experiences for Advanced Exercise Physiology, PET 6366, including ergometry, body composition assessment, pulmonary function tests, oxygen uptake, stress tests, muscular strength, flexibility, blood studies, metabolism.

PET 6365L (formerly PET 6368L) EXERCISE PHYSIOLOGY LABORATORY TECHNIQUES (3)
PR: PET 6366 and PET 6366L. Theoretical and laboratory methods utilized in exercise physiology adult fitness and sports medicine programs. Hands-on exposure to laboratory equipment and development of skills in conducting laboratory measurements in human performance.

ARTS EDUCATION

UNDERGRADUATE COURSES

ARE 3044 EXPERIENTIAL BASIS OF ARTISTIC MIND (3)
PR: Admission to College of Education. Designed to help the individual student discover and develop meanings and values in art and education with emphasis on communicative skills, both verbal and visual. Focus will be on the individual and potential alternatives in the teaching of art.

ARE 3354 ART TEACHING STRATEGIES I (3)
PR: Admission to College of Education and ARE 3044. A combination of theory, philosophy and practice in both public and private learning centers to provide the student with a variety of teaching concepts and media exploration in art education and to further enable the student to understand stages of young people, three to eighteen.

ARE 4112 EDUCATION THROUGH CRAFTS (3)
An in-depth study of arts and crafts media for children. Emphasis will be placed on innovative use of new materials.

ARE 4260 SEMINAR IN ART EDUCATION CLASSROOM MANAGEMENT (1)
PR: Admission to College of Education and ARE 3044. The concepts and areas of skill essential to successful practice in art education management. To include understanding of how art programs are evaluated, art facility planning, art curriculum development, art exhibition techniques, public relations promotion and supply and equipment requirements.

ARE 4411 EDUCATION THROUGH FILM (3)
A study of basic experimental film techniques and laboratory experiences with children in the public schools, community centers, and non-school arts programs.

ARE 4440 ART TEACHING STRATEGIES II (3)
A study of basic experimental film techniques and laboratory experiences with children in the public schools, community centers, and non-school arts programs.

ARE 4443 CRAFTS WORKSHOP IN ART EDUCATION (3)
PR: Admission to College of Education and ARE 3044. The study of processes and media involved in the expression of individual ideas through crafts. Emphasis placed on crafts in a contemporary society with skills in metals, weaving, fibers, and ceramics and their application in a public school curriculum.

ARE 4642 URBAN ENVIRONMENT ARTS WORKSHOP (3)
PR: Admission to College of Education and ARE 3044. Identification, exploration, and experimentation with unique urban spaces and populations as potential new environments for teaching and learning in arts.

ARE 4720 DEPENDENT STUDY: ART EDUCATION (1-4)
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

ARE 4909 DIRECTED STUDY: ART EDUCATION (1-3)
PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

ARE 4936 SENIOR SEMINAR IN ART EDUCATION (2)
PR: Senior standing. Synthesis of teacher candidate's courses in com-
pplete college program. Required concurrently with internship.

ARE 4945 INTERNSHIP
Part-time internship in an accredited public or private school. To be taken concurrently with departmental requirements and will include beginning of year experiences when taken in Fall Semester. S/U only.

ARE 4946 INTERNSHIP
PR: Admission to the College of Education and/or department approval. Internship with an accredited public or private school which will include the end of an academic year or program closing. S/U only.

EDG 4451 EDUCATION THROUGH DRAMA
A study of the dramatic process as intrinsic in human development, this course is designed to enrich the education of pre-service teachers by providing training in the use of creative drama and related forms of improvised drama in the classroom.

EDG 4452 THEATRE FOR PRE-SECONDARY SCHOOLS
THE PRODUCTION PROCESS
The play production process as it applies to theatre artist-in-schools programs, including development of related classroom workshops and preparation of study guides and educational program materials as well as design, direction and rehearsal of play and touring methods. May be repeated for elective credit two times; once for major credit.

EDG 4453 THEATRE FOR PRE-SECONDARY SCHOOLS: THE PERFORMANCE PROCESS
The artistic process of performing for various school audiences and practice conducting classroom workshops following each performance. May be repeated for elective credit two times; once for major credit.

EDG 4454 METHODS OF TEACHING THEATRE FOR ADOLESCENTS
PR: Methods of effective drama and theatre instruction in middle school, junior and senior high schools, recreation centers, community and professional theatres.

GRADUATE COURSES

ARE 6262 MANAGEMENT DESIGN FOR ART INSTITUTIONS
Principles of administration and supervision of art programs in the school.

ARE 6706 BASIS OF INQUIRY INTO ARTISTIC MIND
PR: ARE 6844 or CI. Literature and research in art education. An in-depth study of the current basis of inquiry into artistic mind including a multi-disciplined review of literature and an inquiry project.

ARE 6844 EXPERIENTIAL AND THEORETICAL BASIS OF ARTISTIC MIND
Past and contemporary philosophies and practices in art education.

ARE 6906 INDEPENDENT STUDY: ART EDUCATION
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

ARE 6944 FIELD WORK IN ART EDUCATION
For students with degree-seeking status. Supervised participation in activities related to art education in community centers, non-school arts program, planned workshop and research.

EDG 6455 EDUCATION THROUGH ADVANCED DRAMA
Theories and methods of teaching creative drama and related forms of improvised drama and playmaking with supervised teaching of creative dramatics in a school environment.

BUSINESS AND OFFICE EDUCATION

UNDERGRADUATE COURSES

BTE 2060 BASIC TYPEWRITING
Basic keyboarding introduced during the first two weeks. Thereafter, the psychological principles of skill building and basic keyboarding applications are emphasized. Students with keyboarding skills of 40 wpm should be enrolled in BTE 3061.

BTE 3031 OFFICE INFORMATION PROCESSING
PR: BTE 2060 or equivalent competencies. Application of concepts and technology of information processing to office operations. Review of the grammar, punctuation, and transcription skills needed for editing in word processing operations. Available to majors and non-majors.

BTE 3032 OFFICE INFORMATION PROCESSING II
PR: BTE 3031. Programming and word information processing equipment; special applications of word and information processing functions to solve field-based problems. Available to majors; or others only with CI.

BTE 3061 TYPEWRITING APPLICATIONS
PR: BTE 2060 or equivalent competencies. Advanced keyboard applications; study of the methods and psychological principles appropriate to the teaching of advanced typewriting courses.

BTE 3363 BUSINESS AND OFFICE MACHINES
Instruction and practice on selected business and office machines to acquaint students with capabilities and limitations of the machines.

BTE 3365 ADMINISTRATIVE OFFICE MANAGEMENT
Functions of the business office to include systems and procedures, communications, records, management, office employee behavior, controlling the work of the office, and principles of office organization. Also includes the methodology necessary for teaching these areas in other separate courses or integrated block programs.

BTE 4063 PRINCIPLES OF SUPERVISED SHORTHAND
PR: Completion of upper level competency test or CI. Relation of techniques for teaching basic principles of response and temporal contiguity as related to basic shorthand theory. Includes concurrent lab.

BTE 4064 INTERMEDIATE SHORTHAND
PR: BTE 4063 or equivalent competency to include teaching strategies for lower sequencing. Advanced course in theoretical applications with emphasis on teaching techniques for development of speed, kines­thetic chained response, and specialized pre-transcription techniques. Includes concurrent lab.

BTE 4151 SHORTHAND DICTATION & TRANSCRIPTION
PR: BTE 4064 or equivalent competency levels. Comparative symbol shorthand systems and teaching methodology in developing advanced dictation and transcription skills within a selected symbol system. Emphasis on teaching shorthand as a language tool, development of decision making skills, and factors which affect production rate. Includes concurrent lab.

BTE 4360 METHODS OF TEACHING: BUSINESS EDUCATION
PR: Introduction to Computers I or equivalent. Satisfactory competencies in Office Administration Concentration, or CI. Methods, techniques and materials for instruction.

BTE 4364 SPECIAL TEACHING METHODS: BUSINESS EDUCATION
PR: Speech Improvement and Phonetics, satisfactory competencies in Office Technology Concentration, or CI. Methods, techniques, and materials for skill development.

BTE 4369 OFFICE OCCUPATIONS PROCEDURES
PR: Successful completion of all basic competency exams required by the program area, or consent of program coordinator. This course is designed to integrate learnings from preceding business and office education courses.

BTE 4905 INDEPENDENT STUDY: BUSINESS EDUCATION
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

BTE 4909 DIRECTED STUDY: BUSINESS EDUCATION
PR: Senior standing. Extend competency in teaching field. Offered only as a scheduled class.

BTE 4936 SENIOR SEMINAR IN BUSINESS AND OFFICE EDUCATION

BTE 4940 INTERNSHIP: BUSINESS EDUCATION
One full semester of internship in a public or private school. Intern takes Senior Seminar in Business Education concurrently. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 semester hours. (S/U only.)

BTE 4945 SUPERVISED FIELD EXPERIENCE: BUSINESS EDUCATION
PR: CI. Planned supervised functions in the area of specialization and co-ordinated with selected schools, government, offices, social agencies, businesses and industries on site. (S/U only.)

BTE 4946 INTERNSHIP
PR: Admission to College of Education and/or departmental appro-
val. Internship in an accredited public or private school which will include the end of an academic year or program closing. (S/U only.)

**BTE 4948 FIELD-BASED SEMINAR IN BUSINESS EDUCATION**

CR: BTE 4360 and BTE 4364. Supervised field experience and orientation to broad field business education. Specifically designed to be preparatory for the internship which occurs the following term. (S/U only.)

**GRADUATE COURSES**

**BTE 571 CURRICULUM CONSTRUCTION: BUSINESS EDUCATION**

Curriculum scope, the process of planning and organizing instructional programs with emphasis in task analysis and process evaluation.

**BTE 5245 PROGRAM MANAGEMENT: BUSINESS EDUCATION**

Organization, coordination, and budgeting of adult, cooperative, and special programs.

**BTE 6385 IMPROVEMENT OF METHODS OF TYPEWRITING INSTRUCTION**

PR: EDF 6431, EDF 6481 or CI. Research-based study of methodology and psychology of teaching typewriting. Includes techniques for developing specialized instructional materials and equipment for the exceptional student.

**BTE 6386 THEORIES OF BASIC BUSINESS & ACCOUNTING INSTRUCTION**

PR: Methods of Teaching or equivalent, EDF 6481 or CI. This course contains a research-based study of theory and methodology in teaching basic business and accounting subjects. The course is available to majors and non-majors and for credit and non-credit workshops and seminars.

**BTE 6387 RESEARCH IMPLICATIONS FOR SHORTHAND PEDAGOGY**

PR: EDF 6481 or CI. Research-based study of methodology and prognosis in the teaching of shorthand as a language skill. Available for credit and non-credit workshops and seminars.

**BTE 6944 PRACTICUM: BUSINESS EDUCATION**

A problem-centered field study in the local community, school, government, office, social agency, business or industry.

**COMPUTERS IN EDUCATION**

**GRADUATE COURSES**

**CAP 6125 MICROCOMPUTER HARDWARE SYSTEMS FOR EDUCATION**

PR: EGC 6305 or Cl. Planning for the selection and configuration of microcomputer hardware systems in education. The logical function of MS-DOS and LSI computer elements and peripherals.

**EDF 6324 PROBLEMS IN INSTRUCTIONAL DESIGN FOR COMPUTERS**

PR: EDF 6215 and experience with two programming languages. Application of diagnostic, design, and feedback strategies to specific instructional tasks.

**EDG 5505 MICROCOMPUTERS IN EDUCATION**

PR: CAP 4100 or CI. Application of computers in education, selection and evaluation of software and hardware, types of CAI, networking, computing resources. Advanced BASIC programming, including random and sequential files, sort routines, advanced graphics.

**EDG 6510 PROGRAMMING LANGUAGES FOR EDUCATION**

PR: EGD 5505 or CI. Development of concepts, strategies, and materials for utilizing programming languages in educational settings. Separate sections will focus on different programming languages such as LOGO, Assembly Language or PASCAL. Repeatable.

**EDG 6535 MICROCOMPUTERS FOR SCHOOL MANAGEMENT**

PR: CI. Application of microcomputer software packages to computerize school management tasks.

**COUNSELOR EDUCATION**

**UNDERGRADUATE COURSES**

**EGC 4001 INTRODUCTION TO GUIDANCE PROCESSES**

PR: Upper level standing. An introduction to the role and function of guidance, school psychology, social work and other pupil personnel services. Opportunities for increasing self awareness.

**EGC 4053 INTRODUCTION TO STUDENT PERSONNEL WORK IN HIGHER EDUCATION**

PR: CI. Study of student personnel services in institutions of higher education. Identification of the needs of students and of the ways to respond to meet these needs. Survey of service units on a campus in terms of structure, organization, funding, etc.

**EGC 4905 INDEPENDENT STUDY: GUIDANCE AND COUNSELING EDUCATION**

PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

**SLS 1101 THE UNIVERSITY EXPERIENCE**

An extended introduction and orientation to USF. Topics include purposes of higher education, structure and function of USF, overview of the processes of career planning and selecting a major, study skills, and managing out-of-class time. (S/U only.)

**GRADUATE COURSES**

**EGC 5101 HUMAN RELATIONS SKILLS IN GUIDANCE**

Introduction to the theory of human relations dynamics and development of skills required for effective interpersonal relations. Lecture sessions and laboratory training.

**EGC 6005 PRINCIPLES AND ORGANIZATION OF GUIDANCE**

Required first course for majors in guidance and counseling; an elective for students in other programs. Guidance as a profession; its philosophical framework; its scope and functions; its organization and administration in various settings.

**EGC 6105 COMPARATIVE GUIDANCE AND COUNSELING**

PR: CI. Study of guidance theories and practices in selected foreign countries as compared with the American guidance model. Evaluation of foreign guidance through critical analysis of primary sources. For example: guidance philosophy and practice in countries of the Soviet Bloc, Western Europe, and Latin America.

**EGC 6225 APRAISAL PROCEDURES IN GUIDANCE**

PR: EFD 6431, EGC 6006. A study of test and non-test techniques of appraisal with emphasis on the use of standardized test data in guidance programs and the use of the individual case study approach.

**EGC 6306 INFORMATION SERVICE AND CAREER GUIDANCE**

PR: EGC 6006. Study of the information service in guidance as it relates to the total life style and career development. Theories dealing with career planning. Application of educational, vocational, and personal-social information resources to lifelong human development.

**EGC 6435 COUNSELING THEORIES AND PRACTICES**

PR: EGD 6354 and EGC 6006. Nature of the counseling process with emphasis on major theoretical approaches, supervised practice, and application. Focuses upon working with adolescents and adults; includes attention to (a) philosophic bases of helping relationships and (b) consultation theory and practice.

**EGC 6464 THE COUNSELING SERVICE IN ELEMENTARY SCHOOLS**

PR: EGD 6354 and EGC 6006. Nature of the counseling process with emphasis on major theoretical approaches, supervised practice, and application. Focuses upon working with elementary age children, and consultations with parents and teachers.

**EGC 6472 COUNSELING SPECIAL POPULATION GROUPS**

PR: EGD 6435 or EGC 6464. Application of counseling theory to work with clients from special population groups, e.g., ethnic minorities, women reentering the labor force, and older persons. Each student will select a specific population group for supervised research.

**EGC 6509 GROUP THEORY AND PRACTICUM: ELEMENTARY SCHOOLS**

PR: EGC 6464. Experiential study of group structures, group dynamics, methodology, and leadership models applicable to counseling and guidance in the elementary schools. Skill building through supervised practicum in leading groups of elementary school children.

**EGC 6510 GROUP THEORY AND PRACTICUM: ADOLESCENTS AND ADULTS**

PR: EGC 6435. Experiential study of group structures, group dynamics, methodology, and leadership models applicable to counseling adolescents and adults. Skill building through supervised practicum in leading groups of adolescents or adults.
EGC 6380 PRACTICUM IN ELEMENTARY GUIDANCE AND COUNSELING (4)  
PR: CC. Supervised counseling experiences for integration of knowledge and skills gained in didactic study. Focus is upon working with elementary age children, parent and teachers. (S/U only.)

EGC 6385 PRACTICUM IN SECONDARY SCHOOL GUIDANCE AND COUNSELING (4)  
PR: CC. Supervised counseling experiences for integration and application of knowledge and skills gained in didactic study. Focus is upon working with adolescents and adults. (S/U only.)

EGC 6905 INDIVIDUAL STUDY (1-4)  
PR: CI. Independent study, research and experience relating to guidance and pupil personnel services under the supervision of a member of the Counselor Education faculty. May be repeated for a maximum of four hours.

EGC 6935 SEMINAR IN GUIDANCE (1-2)  
PR or CR: EGC 6006, CI. Significant issues in the field of guidance; topics for discussion will vary according to needs and interests of students. May be repeated for credit for a maximum of four hours.

EGC 6948 INTERNSHIP IN SCHOOL GUIDANCE (6)  
PR: CC. Field experience involving one semester of full-time participation in all guidance-related activities in an elementary or secondary school; classroom guidance, individual and group counseling, assessment/evaluation, staffing, record keeping, etc. (S/U only.)

EGC 7437 ADVANCED COUNSELING: THEORY AND PRACTICE (5)  
PR: CC. Advanced study of major counseling theories and their application in therapeutic work with individual clients and with groups in a variety of settings. Supervised practice in individual and group counseling with emphasis on integration of theory and practice.

EGC 7446 CONSULTATION AND SUPERVISION: THEORY AND PRACTICE (5)  
PR: CC. Theory and methodology of consultation; the role of the counseling professional as consultant and as supervisor of counselor trainees and counseling practitioners. Practice learning experiences in consulting and supervision under faculty direction.

EGC 7894 ADVANCED INTERNSHIP IN COUNSELOR EDUCATION (2-8)  
PR: CC. Supervised field experiences in an approved agency, educational institution or industrial setting: counseling, consulting, supervision, applied research, administration, and evaluation of counseling/guidance services. Repeatable up to eight semester hours. (S/U only.)

EGC 7935 ADVANCED SEMINAR IN COUNSELOR EDUCATION (2)  
PR: CI. Seminar for advanced graduate students in counselor education. Issues and trends in Guidance and Counseling will be studied and discussed. May be repeated for two additional credit hours. (S/U only.)

### CURRICULUM AND INSTRUCTION

#### UNDERGRADUATE COURSES

**EDG 1300 INTRODUCTION TO TEACHING** (3)  
PR: Freshman only or CI. The people with whom teachers work, the types of tasks they perform and the challenges they can anticipate. Observation of teaching at several grade levels.

**EDG 4200 CURRICULUM AND INSTRUCTION** (3)  
An introduction to the field of curriculum and instruction. Emphasis is placed on identifying educational goals and objectives and applying instructional principles.

**EDG 4901 DIRECTED READINGS** (1-3)  
May be repeated for a total of 3 semester hours.

**EDG 4905 INDEPENDENT STUDY** (1-4)  
PR: CI. Specialized independent study determined by the students' needs and interests. May be repeated when subjects vary. (S/U only.)

**EDG 4909 DIRECTED STUDY** (1-3)  
PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

**EDG 4910 INDIVIDUAL RESEARCH** (1-3)  
PR: Senior standing and consent of program coordinator.

**EDG 4936 SENIOR SEMINAR IN EDUCATION** (2)  

**EDG 4940 INTERNSHIP** (1-12)  
One full semester of internship in a public or private school. Intern takes Senior Seminar in Education concurrently. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 semester hours. (S/U only.)

#### GRADUATE COURSES

**EDE 6205 SCHOOL CURRICULUM: ELEMENTARY** (3)  
PR: EGC 4200. Designed to examine the organization, curriculum, and instruction of the elementary school with special emphasis on the nature of the student served in the elementary school. Open to all education graduate students.

**EDG 5206 CURRICULUM AND INSTRUCTION** (3)  
A study of a systematic approach to making curriculum and instructional decisions in the classroom.

**EDG 5925 EDUCATION WORKSHOP** (1-4)  
Workshop for the improvement of the curriculum of an elementary or secondary school. Open only to teachers in service. Complete faculty participation required. (S/U only.)

**EDG 6250 FOUNDATIONS OF CURRICULUM AND INSTRUCTION** (3)  
PR: EDG 4200 or 5206. An introductory course in curriculum and instruction at the graduate level, basic to all specialized courses in the field. Emphasis on foundations, design, basic concepts, and theory and trends of curriculum from early childhood through secondary levels. The course is open to all graduate students.

**EDG 6251 SCHOOL CURRICULUM IMPROVEMENT** (3)  
PR: Workshop for the improvement of the curriculum of an elementary or secondary school. Open only to teachers in service. Complete faculty participation required.

**EDG 6693 PROBLEMS IN CURRICULUM AND INSTRUCTION: ELEMENTARY** (1-3)  
PR: EDG 4200. For teachers, supervisors, and administrators. Curricular and instructional problems of the elementary school. Common problems or problems of special interest to the participants. Normally, for certification requirements only.

**EDG 6694 PROBLEMS IN CURRICULUM AND INSTRUCTION: MIDDLE SCHOOL** (1-3)  
PR: EDG 4200. For teachers, supervisors, and administrators. Curricular and instructional problems of the middle school. Common problems or problems of special interest to the participants. Normally, for certification requirements only.

**EDG 6695 PROBLEMS IN CURRICULUM AND INSTRUCTION: SECONDARY** (1-3)  
PR: EDG 4200. For teachers, supervisors, and administrators. Curricular and instructional problems of the secondary school. Common problems or problems of special interest to the participants. Normally, for certification requirements only.

**EDG 6906 INDEPENDENT STUDY** (var.)  
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**EDG 7910 SELECTED TOPICS IN EDUCATION** (1-4)  
PR: Graduate standing and CI. Each topic is a course under the supervision of a faculty member. The title and content will vary according to the topic.

**EDG 6947 INTERNSHIP** (1-9)  
PR: CI. Open to graduate degree candidates only. Supervised teaching at the secondary or junior college level as appropriate. (S/U only.)

**EDG 7661 THESIS: MASTER'S EDUCATION SPECIALIST** (var.)  
For students in M.A. or Ed.S. programs requiring a thesis. This project is a culminating, integrating experience which aims at relating theory to practice. Repeatable. (S/U only.)

**EDG 7325 ANALYSIS OF TEACHING** (3)  
PR: EDG 6250 or CI. Develops skills in systematic observation. Study and development of related research design models.

**EDG 7667 ANALYSIS OF CURRICULUM AND INSTRUCTION** (3)  
PR: EDG 6250. A study of a variety of models and frameworks for analyzing curriculum and instruction. Emphasis on rational models of curriculum inquiry.

**EDG 7692 ISSUES IN CURRICULUM AND INSTRUCTION** (3)  
PR: EDG 6250. Identification and analysis of major problems and issues in curriculum and instruction. Critical examination of efforts to deal with these issues.

**EDG 7910 DIRECTED RESEARCH** (var.)  
PR: GR. Ph.D. level. Repeatable. (S/U only.)

**EDG 7931 SELECTED TOPICS** (1-4)
DEC 4946 INTERNSHIP
(1-2)
PR: Admission to the College of Education and/or departmental approval. Internship in an accredited public or private school which will include the end of an academic year or program closing. (S/U only.)

GRADUATE COURSES

DEC 5175 PROGRAM MANAGEMENT: DISTRIBUTIVE EDUCATION
Organization, coordination, and budgeting of adult, cooperative, and special programs.

DEC 5185 CURRICULUM CONSTRUCTION: DISTRIBUTIVE EDUCATION
Curriculum scope, the process of planning and organizing instructional programs with emphasis on task analysis and process evaluation.

DEC 6945 PRACTICUM: DISTRIBUTIVE EDUCATION
(3-6)
A problem-centered field study in the local community, school, government, office, social agency, business, or industry.

ELEMENTARY EDUCATION

UNDERGRADUATE COURSES

ARE 4313 ART FOR THE CHILD AND YOU
PR: Admission to College of Education. Art and the intellectual, creative, emotional, and aesthetic growth of children.

EDE 4301 TEACHING METHODS IN THE ELEMENTARY SCHOOL
PR: EDE 4941 and EDG 4200. Techniques and strategies appropriate to instruction of children in educational settings.

EDE 4905 INDEPENDENT STUDY: ELEMENTARY EDUCATION
(1-4)
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

EDE 4909 DIRECTED STUDY: ELEMENTARY EDUCATION (1-3)
PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

EDE 4936 SENIOR SEMINAR IN ELEMENTARY EDUCATION

EDE 4940 INTERNSHIP: ELEMENTARY EDUCATION
PR: EDE 4941 and EDE 4942. Teacher candidate is required to demonstrate professional competencies during one semester of full-day internship in a public or private elementary school. Concurrent enrollment in EDE 4936. (S/U only.)

EDE 4941 CHILDHOOD EDUCATION INTERNSHIP LEVEL I
PR: Application for admission to the Elementary or Elementary/Early Childhood programs. Students spend six hours per week in a supervised in-school experience and attend weekly seminar. Concurrent enrollment in EDG 4200-Elementary section. (S/U only.)

EDE 4942 CHILDHOOD EDUCATION INTERNSHIP LEVEL II
PR: EDE 4941. Students spend 12 hours per week in a supervised internship experience in classroom settings and attend a weekly seminar.

EEC 2003 INTRODUCTION TO EARLY CHILDHOOD EDUCATION
(3)
An overview of early childhood education with emphasis on its historical development, current theories, and practices.

EEC 2007 PROGRAMS IN EARLY CHILDHOOD EDUCATION
(4)
PR: Admission to College of Education. A study of school programs for children age 3-8. Analysis and evaluation of these programs in the light of the most effective current classroom practices. Observation and participation included.

EEC 4303 CREATIVE EXPERIENCES IN EARLY CHILDHOOD EDUCATION
(3)
PR: Admission to College of Education. The development of the child's creative expression through art, music, dance, play, and drama; included are the materials, content, and teaching techniques.

ECC 4706 LANGUAGE AND LEARNING IN EARLY CHILDHOOD
(3)
PR: Admission to College of Education. The study of the acquisition of language in young children and the development of basic communication skills in the Language Arts Curriculum, infancy through age 8 years.
EEC 4905 INDEPENDENT STUDY: ELEMENTARY-EARLY CHILDHOOD EDUCATION (1-4)
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

EEC 4909 DIRECTED STUDY: ELEMENTARY-EARLY CHILDHOOD EDUCATION (1-3)
PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

EEC 4936 SENIOR SEMINAR IN ELEMENTARY-EARLY CHILDHOOD EDUCATION (2)

EEC 4940 INTERNSHIP: ELEMENTARY/ELEMENTARY EARLY CHILDHOOD (10)
Teacher candidate is required to demonstrate professional competencies during one semester of full-day internship in a public or private elementary school. Concurrent enrollment in EEC 4936. (S/U only.)

HLP 4460 HEALTH AND PHYSICAL EDUCATION FOR THE CHILD (3)
PR: Admission to the College of Education. A study of the importance of movement competency and its contribution to the development of a positive self-concept in children; content and methodology for developing appropriate movement experiences for children; content and methodology for teaching elementary health science.

LAE 4314 LANGUAGE ARTS IN CHILDHOOD EDUCATION (3)
PR: Admission to the College of Education. The exploration of the content, organization and instruction of oral communication and written expression in Childhood Education.

LAE 4414 LITERATURE IN CHILDHOOD EDUCATION (3)
PR: Admission to College of Education. The selection, evaluation and use of fiction, nonfiction and poetry for instructional, informational, and recreational purposes in Childhood Education.

MAE 4310 TEACHING ELEMENTARY SCHOOL MATHEMATICS I (3)
PR: Admission to College of Education, Number Systems, Basic Algebraic Concepts, Informal Geometry, or equivalent, and a passing score on the College of Education Test of Mathematical Competencies. Methods for teaching number ideas, computation skills, and mathematical reasoning.

MAE 4311 TEACHING ELEMENTARY SCHOOL MATHEMATICS II (2)
PR: MAE 4310. Methods for teaching informal geometry, measurement, and probability and statistics.

MAE 4545 DIAGNOSIS AND TREATMENT OF LEARNING DISABILITIES IN SCHOOL MATHEMATICS (3)
PR: MAE 4310 or equivalent. Presentation and analysis of teaching methods and models appropriate for use with students experiencing learning disabilities in mathematics; supervised conduct of a case study.

MUE 4315 MUSIC FOR THE CHILD (3)
PR: Admission to College of Education. Music fundamentals, the development of music skills and knowledge of music materials and teaching strategies for presenting music to children in the elementary school.

RED 4310 READING FOR THE CHILD (3)
PR: Admission to College of Education. Prereading, word recognition, comprehension and basic study skills and various reading approaches and reading interests.

SCS 4310 TEACHING ELEMENTARY SCHOOL SCIENCE (3)
PR: Admission to College of Education and completion of General Distribution Requirements in the Natural Science area. Techniques and materials for teaching science in the elementary school.

SSE 4313 TEACHING ELEMENTARY SCHOOL SOCIAL STUDIES (3)
PR: Admission to College of Education or CI. Methods of planning and teaching subjects related to the study of people and their relationships with other people and their environment.

GRADUATE COURSES

ARE 6358 ART FOR THE ELEMENTARY SCHOOL TEACHER (3)
Exploration of various materials and techniques in relationship to current theories about art and the intellectual, creative, emotional and esthetic growth of children.

EDL 5441 INDIVIDUALIZED INSTRUCTION IN THE ELEMENTARY SCHOOL (3)
PR: Senior or Graduate standing in the College of Education or CI. A study of selected methods and materials available for the implementation of individualized instruction in grades K-6.

EDL 6305 CREATIVE TEACHING IN THE ELEMENTARY SCHOOL (3)
Creative processes for teaching of visual arts, music, dance, and drama to elementary school pupils.

EDL 6906 INDEPENDENT STUDY: ELEMENTARY/EARLY CHILDHOOD EDUCATION (1-6)
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

EDG 6535 SEMINAR IN CURRICULUM RESEARCH (1-3)
PR: EDF 6481. Critical evaluation of current research and curriculum literature, design and analysis of individual research topics leading to satisfaction of research requirements.

EDS 6930 PROBLEMS IN SUPERVISION (3)
PR: EDF 6481 or equivalent and EDS 6620. Problems in supervising for curriculum improvement within the elementary school.

EEC 5406 SOCIAL GROWTH IN CHILDHOOD (3)
PR: Admission to College of Education. A study of the principal factors which influence the social development of young children with particular emphasis upon those cultural influences which affect both child development and the educational programs for the young child.

EEC 5705 INTELLECTUAL GROWTH IN CHILDHOOD (3)
Intellectual development of the normal child with particular emphasis on the studies of Jean Piaget and how they relate to curriculum for children, ages 0-6.

EEC 5926 WORKSHOP IN EARLY CHILDHOOD EDUCATION (3)
PR: Admission to College of Education. Individual problems and innovations related to methods and materials of instruction in the early childhood grades.

EEC 6261 ADVANCED PROGRAMS IN EARLY CHILDHOOD EDUCATION (3)
PR: EDF 6431, EEC 4203 or CI. A study of innovative curriculum designs in Early Childhood Education, with emphasis given to related research.

EEC 6405 HOME-SCHOOL-COMMUNITY INTERACTION IN EARLY CHILDHOOD EDUCATION (3)
PR: EDF 6431, EEC 4203 or CI. An intensive study of the roles of parents, teacher aides, and community agencies involved in the education of the young child.

LAE 6301 LANGUAGE LEARNING IN CHILDHOOD (3)
PR: Graduate standing in the College of Education. The study of research which has been used to assess the language behavior of normal children. Attention will also be given to the application of selected research methodology to understanding linguistics behavior of children.

LAE 6415 LITERATURE AND THE LEARNER (3)
This course is designed to acquaint the student with the nature, scope and uses of literature for instructional, informational, and recreational purposes. The implication of current theory, significant research and issues in literature study will be investigated and examined as they relate to the learner.

LAE 6616 TRENDS IN LANGUAGE ARTS INSTRUCTION (3)
PR: LAE 4314 or equivalent or CI. A study of significant concepts, emerging trends, research and instructional techniques for implementation and utilization of language arts in all areas of the curriculum.

LAE 7617 THEORIES AND PATTERNS OF ADVANCED LANGUAGE ARTS INSTRUCTION (3)
PR: LAE 6616 or equivalent. This course is organized to present new research findings and theories relating to language patterns and contemporary programs designed for teaching language arts.

LAE 7746 APPLICATIONS OF THEORIES TO THE DEVELOPMENT OF LANGUAGE ARTS PROGRAMS (3)
PR: LAE 6616 or equivalent; and LAE 7617. This course is designed to apply research finding and theories for developing and organizing instructional improvement of the language arts.

LAE 7747 LITERATURE PROGRAM DESIGN (3)
PR: EDF 6481, LAE 6451, or LAE 6336 or CI. Advanced graduate standing. Investigation and analysis of the research in literature instruction and the application of the findings to the development of literature programs.

MAE 6116 CURRENT TRENDS IN ELEMENTARY MATHEMATICS EDUCATION (3)
PR: MAE 4310 or equivalent. Philosophy, content and process of qualitative instruction in modern mathematics in elementary school programs.

MAE 6548 ADVANCED DIAGNOSIS AND TREATMENT OF
LEARNING DISABILITIES IN SCHOOL MATHEMATICS (3)  
PR: MAE 4310 or equivalent. Study of the symptoms, etiologies and consequences of children's learning disabilities in mathematics; study and guided application of theoretical models used in diagnosis and treatment; supervised conduct of a case study.

MAE 6549 ADVANCED PRACTICUM IN DIAGNOSIS AND TREATMENT OF LEARNING DISABILITIES IN SCHOOL MATHEMATICS (1-6)  
PR: MAE 6548. Supervised conduct of a case study with a student experiencing learning difficulties in mathematics. Procedures used and reporting practice employed developed in MAE 6548 reviewed and extended.

RED 6116 CURRENT TRENDS IN ELEMENTARY READING INSTRUCTION (3)  
PR: RED 4310 or equivalent course. Study of approaches, materials and procedures in Elementary Reading instruction, with emphasis on pertinent research. Not for undergraduate nor to be used as a first course in Reading.

SCE 6616 TRENDS IN SCIENCE INSTRUCTION (3)  
PR: SCE 4310. Topics in the biological and physical sciences appropriate for teaching in excellent elementary school programs. Analysis of appropriateness for teaching in excellent elementary school programs. Analysis of problems approach. Students will select an area of independent study on an advanced level.

ENGLISH EDUCATION  
UNDERGRADUATE COURSES  
LAE 4335 METHODS OF TEACHING ENGLISH — LITERATURE AND READING (3)  
PR: RED 4360 or CC. A survey of materials available to adolescent readers plus an overview of organizational strategies for teaching literature and reading.

LAE 4530 READING SKILLS IN ENGLISH EDUCATION (2)  
PR: RED 4360 or CC. Methods of dealing with reading problems and application of general reading concepts in English Education. (S/U only.)

LAE 4642 CURRENT TEACHING OF ENGLISH LANGUAGE AND MEDIA (3)  
CR: EDG 4200 and LAE 4335. Methods of teaching language and media. Includes current findings on teaching usage, dialect, grammar, and semantics, as well as approaches to media in English.

LAE 4902 INDEPENDENT STUDY: ENGLISH EDUCATION (1-4)  
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

LAE 4909 DIRECTED STUDY: ENGLISH EDUCATION (1-3)  
PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

LAE 4963 SENIOR SEMINAR IN ENGLISH EDUCATION (2)  

LAE 4960 INTERNSHIP: ENGLISH EDUCATION (1-12)  
One full semester of internship in a public or private school. Intern takes Senior Seminar in Education concurrently. In special programs where the intern experience is distributed over two or more semesters, student will be registered for credit which accumulates from 9 to 12 semester hours. (S/U only.)

LAE 4945 INTERNSHIP (1-4)  
Part-time internship in an accredited public or private school. To be taken concurrently with departmental requirements and will include beginning of year experiences when taken in Fall Semester (S/U only.)

LAE 4946 INTERNSHIP (1-2)  
PR: Admission to the College of Education and/or departmental approval. Internship in an accredited public or private school which will include the end of an academic year or program closing. (S/U only.)

GRADUATE COURSES

LAE 5932 SELECTED TOPICS IN THE TEACHING OF ENGLISH (3)  
PR: Certification in English and/or Mass Communications and approval of graduate adviser. Investigation of topics which are of special interest to the student and are related to the teaching of English in the secondary school. Topics will be selected by the student in accordance with his particular goals and will be approved by the student's graduate adviser.

LAE 6336 NEW PERSPECTIVES ON THE TEACHING OF LITERATURE IN SECONDARY SCHOOLS (3)  
PR: Certification in English or Mass Communications. Survey of recent investigation into adolescents' perception of and responses to literature and implications for organization and presentation of literature curricula.

LAE 6637 CURRENT TRENDS IN SECONDARY ENGLISH EDUCATION (3)  
Curricular patterns and instructional practices in secondary English.

LAE 6644 CURRENT TEACHING OF THE ENGLISH LANGUAGE (3)  
Application of recent techniques of language study to classroom teaching of English, especially in relation to current textbooks.

FOREIGN LANGUAGE EDUCATION  
UNDERGRADUATE COURSES  
FLE 4164 FOUNDATIONS OF BILINGUAL EDUCATION (2)  
PR: Proficiency in English and one other language. Introduction to Bilingual/Bicultural Education including study of laws, programs, teaching situations and needs of minority groups.

FLE 4333 FOREIGN LANGUAGE TEACHING IN THE SECONDARY SCHOOL (3)  

FLE 4334 PRACTICUM IN FOREIGN LANGUAGE TEACHING IN THE SECONDARY SCHOOL (3)  
PR: FLE 4333. Research on available literature in the field of foreign language education and the psychology of language learning. Examination of the interdependence of language, culture, and geography. Extended study and practice of the sequential steps of foreign language teaching with emphasis on the audio-lingual approach.

FLE 4905 INDEPENDENT STUDY: FOREIGN LANGUAGE EDUCATION (1-4)  
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

FLE 4909 DIRECTED STUDY: FOREIGN LANGUAGE EDUCATION (1-3)  
PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

FLE 4936 SENIOR SEMINAR IN FOREIGN LANGUAGE EDUCATION (2)  

FLE 4940 INTERNSHIP: FOREIGN LANGUAGE EDUCATION (1-12)  
One full semester of internship in a public or private school. Intern takes Senior Seminar in Education concurrently. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 semester hours. (S/U only.)

FLE 4945 INTERNSHIP (1-4)  
Part-time internship in an accredited public or private school. To be taken concurrently with departmental requirements and will include beginning of year experiences when taken in Fall Semester (S/U only.)

FLE 4946 INTERNSHIP (1-2)  
PR: Admission to the College of Education and/or departmental approval. Internship in an accredited public or private school which will include the end of an academic year or program closing. (S/U only.)
GRADUATE COURSES

FLE 6645 CURRENT TRENDS IN SECONDARY FOREIGN LANGUAGE EDUCATION (3)
PR: Foreign language fluency and CI. Curricular patterns and instructional practices in the teaching of secondary foreign languages.

FOUNDATIONS EDUCATION

UNDERGRADUATE COURSES

EDF 3122 LEARNING AND THE DEVELOPING CHILD (4)
PR: General Psychology and admission to College of Education. Pre-adolescent child growth and development, learning theory, and behavior analysis applied to instruction and to the organization and management of classroom.

EDF 3210 EDUCATIONAL PSYCHOLOGY (3)
PR: Upper level standing. The application of behavioral principles to human behavior in educational institutions, home and community settings. May not be counted for EDF 3214. (For non-education majors only.)

EDF 3214 HUMAN DEVELOPMENT AND LEARNING (3)
PR: General Psychology and admission to College of Education. Application of respondent and operant learning principles to classroom learning, teaching models for different instructional goals, analysis of teacher behavior, micro-teaching.

EDF 3220 BEHAVIOR MANAGEMENT IN ELEMENTARY SCHOOLS (2)
PR: EDF 3122. The application of theory and basic principles of learning to design for classroom instruction and child management procedures. Basic concepts of applied behavior analysis including the accurate measurement of child and teacher behavior in the ongoing instructional setting.

EDF 3228 BEHAVIOR MODIFICATION TECHNIQUES (4)
PR: EDF 3214. Special techniques in behavior modification for children with learning difficulties. Minimum of two hours field experience required in addition to regular class hours.

EDF 3542 PHILOSOPHY OF EDUCATION (4)
PR: Upper level standing. A study of philosophy of education with an emphasis on aspects that are relevant to an understanding of the issues and problems of teaching.

EDF 3554 VALUES CLARIFICATION FOR TEACHERS (3)
PR: Upper level standing recommended. Techniques for teachers in identifying and analyzing values and value orientations of individuals and groups of students in the school.

EDF 3604 SOCIAL FOUNDATIONS OF EDUCATION (3)
PR: Admission to College of Education. Social, economic and political context within which schools function and the values which provide direction for our schools; the culture as a motivating influence in instruction. Should not be taken concurrently with EDF 3214.

EDF 3710 COMPARATIVE EDUCATION (3)
PR: Upper level standing. A comparison of contemporary educational systems of selected countries with that of the United States.

EDF 4905 INDEPENDENT STUDY: EDUCATIONAL FOUNDATIONS (1-4)
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

EDF 4909 DIRECTED STUDY: EDUCATIONAL FOUNDATIONS (1-3)
PR: Senior Standing. To extend competency in teaching field. Offered only as a scheduled class.

GRADUATE COURSES

EDF 5136 ADOLESCENCE (4)
Study of the educational, intellectual, personality, physical, social and vocational factors in adolescence and their importance for school personnel.

EDF 5285 PROGRAMMED INSTRUCTION AND TEACHING MACHINES (3)
Principles for programming in the several academic subjects.

EDF 5672 AMERICAN DEMOCRACY AND PUBLIC EDUCATION (3)

Interdependence of the public school and democracy in the United States and the responsibility of the school in fostering and strengthening basic democratic principles.

EDF 6120 CHILD DEVELOPMENT (4)
PR: EDF 6211 or CI. Educational, emotional, hereditary, intellectual, social and physical factors influencing child growth and development.

EDF 6211 PSYCHOLOGICAL FOUNDATIONS OF EDUCATION (3)
Selected topics in psychology of human development and learning.

EDF 6213 BIOLOGICAL BASES FOR LEARNING AND BEHAVIOR (3)
PR: One course in Educational Psychology. A study of human biological development and its influence upon learning and behavior.

EDF 6215 LEARNING PRINCIPLES APPLIED TO INSTRUCTION (4)
PR: Graduate Standing. Study of learning principles and their application to classroom instruction.

EDF 6217 BEHAVIOR THEORY AND CLASSROOM LEARNING (4)
PR: EDF 6215 or CI. Theoretical and practical applications of behavior modification; introduction to experimental methods for behavior modification; operant methods in behavior and development; analysis and field work.

EDF 6354 THEORIES OF PERSONALITY FOR SCHOOL PERSONNEL (4)
Survey and analysis of major personality theories with emphasis on psycho-social and cognitive development throughout a person's life span. Application of relevant theoretical constructs to education and guidance.

EDF 6517 HISTORICAL FOUNDATIONS OF AMERICAN EDUCATION (4)
PR: Graduate standing. A study of the history of the origins and development of American education, events and movements that have shaped school policies and practices, and their relationship to contemporary developments and problems.

EDF 6520 EDUCATION IN WESTERN CIVILIZATION (4)
PR: Graduate standing; basic course in western history or history of philosophy. Study of educational ideas, institutions, practices and prominent theorists from the western tradition and their continuing influence of modern education.

EDF 6544 PHILOSOPHICAL FOUNDATIONS OF AMERICAN EDUCATION (3)
Major philosophies of education which are relevant to an understanding of contemporary educational issues.

EDF 6606 SOCIO-ECONOMIC FOUNDATIONS OF AMERICAN EDUCATION (4)
PR: Graduate standing. A study of socio-economic factors as they relate to the work of professional educators and the role of public education in American society.

EDF 6712 SEMINAR IN COMPARATIVE EDUCATION (4)
Contemporary policies and practices in education in selected countries of the world. Methodology in Comparative Education.

EDF 6805 WOMEN AND EDUCATION (3)
Course is designed to enable public school personnel, teachers, counselors, administrators and other professionals, to identify those aspects of public education which perpetuate sex role stereotyping. Emphasis will be placed on how the law and formal and informal affirmative action activities can be employed to correct sexism in schools.

EDF 6830 EDUCATION, COMMUNICATION, AND CHANGE (4)
PR: Graduate standing or CI. Implications for education of the developments in communication, emphasizing the role of innovations as a catalyst in the process of social change as it affects students, teachers, and traditional school arrangements.

EDF 6860 SCHOOLS AND THE FUTURE (4)
Examination of estimates of future demands upon schools; critique of current paradigms, techniques and literature.

EDF 6906 INDEPENDENT STUDY: EDUCATIONAL FOUNDATIONS (1-6)
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

EDF 6938 SELECTED TOPICS (1-4)
PR: CI. Exploration and demonstration of knowledge in an area of special interest to the student and/or in an area for which the student needs to demonstrate a higher level of competence. Defined to fit the needs of each student.
EDF 6944 FIELD EXPERIENCE (1-4)
PR: CI. Demonstrate skills in the practice of the students' specialty. Specific objectives will be defined according to the needs of the individual student.

EDF 7143 MEASUREMENT OF COGNITIVE FUNCTIONING IN CHILDHOOD AND ADOLESCENCE (4)
PR: A course in measurement and CI. Investigation of theories and measurement of cognitive functioning in childhood and adolescence.

EDF 7586 CLASSICS IN EDUCATIONAL RESEARCH (4)
PR: Graduate standing; EDF 6517, EDF 6544, EDF 6606, or CI. An examination of the context, methodology, and impact of significant research studies in education.

EDF 7610 SCHOOL REFORM (3)
Historical critique of causes and effects of school reform efforts.

EDF 7649 ANALYSIS OF EDUCATIONAL ISSUES (3)
Socio-cultural, historical, and axiological examination of selected issues in public education.

EDF 7655 ORGANIZATION DEVELOPMENT IN EDUCATIONAL INSTITUTIONS (4)
PR: Graduate standing, EDF 6517, EDF 6544, EDF 6606, or CI. The application of social and behavioral science theory to the organizational and developmental problems of schools and school systems.

EDF 7682 EDUCATION IN METROPOLITAN AREAS (4)
PR: Graduate standing; EDF 6517, EDF 6544, EDF 6606, or CI. Study of the school as a formal, socializing institution and its relationship to the various school populations found in metropolitan areas.

SBS 6806 DEVELOPMENTAL BASES OF DIVERSE BEHAVIORS (4)
PR: CI. This course covers the major developmental causes and effects of various diverse forms of human behavior.

SBS 6936 GRADUATE SEMINAR IN SCHOOL PSYCHOLOGY (1-3)
PR: CI. Seminars to explore current matters of professional concern in school psychology such as trends, problems, legal and ethical issues, empirical bases of techniques. May be repeated up to 9 credit hours (with different subject fatters).

HEALTH EDUCATION

UNDERGRADUATE COURSES

HES 2000 CONTEMPORARY HEALTH SCIENCE (3)
A comprehensive approach to health concerns and problems in contemporary society, including methods of assessing individual health needs.

HES 3122 HUMAN STRUCTURE AND FUNCTION (4)
PR: Fundamentals of Biology/lab, admission to the program or CI. Major concepts of the structure and function of the human body systems and methods by which these concepts may be taught. Lab included.

HES 3140 CHILD HEALTH (3)
PR: Admission to the Health Education Program or CI. Development or curricula, health services, health assessment procedures, and health education programs for children.

HES 3141 PUBESCENT AND ADOLESCENT HEALTH (3)
PR: Admission to the program and HES 3140 or CI. Health education content and programs relating to pubescents and adolescents.

HES 3244 HEALTH COUNSELING (3)
PR: Admission to the Health Education Program or CI. A study and application of methods of health counseling.

HES 3300 PROCESSES AND PROGRAMS IN HEALTH EDUCATION (2)
PR: Admission to the Health Education Program or CI. Survey of programs in Health Education in the school and community. Processes in programs and curriculum development will also be emphasized.

HES 3510 CONSUMER HEALTH (3)
PR: Admission to the Health Education Program or CI. An investigation of advertising and consumer practices in relation to health care. (S/U only.)

HES 4143 ADULT HEALTH (4)
PR: Admission to the Health Education Program and HES 3141 or CI. Health problems, services, and education of the adult population.

HES 4144 MEDICAL LANGUAGE FOR THE HEALTH PROFESSIONS (2)
Basic preparatory course for all the health professions. Provides both a basic medical vocabulary and wordbuilding skills for ease of terminology acquisition.

HES 4276 HEALTH CARE DELIVERY SYSTEMS (3)
PR: Admission to the Health Education Program or CI. An investigative study and evaluation of health care delivery systems in the U.S. and other countries.

HES 4700 ORGANIZATION AND ADMINISTRATION OF COMMUNITY HEALTH (3)
Organization and administration of community health programs. A written program plan is required.

HES 4722 CURRENT PROBLEMS IN HEALTH (3)
PR: Admission to the Health Education Program or CI. An investigation of current health problems, programs, and research methods.

HES 4750 RESEARCH IN HEALTH EDUCATION (3)
PR: Admission to the Health Education Program and concurrent enrollment in HES 4943. Students are expected to complete a research project for a health agency.

HES 4905 INDEPENDENT STUDY: HEALTH EDUCATION (1-4)
PR: CI. Specialized independent study determined by the student’s needs and interests. Repeatable.

HES 4909 DIRECTED STUDY: HEALTH EDUCATION (1-3)
PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

HES 4940L INTERNSHIP IN HEALTH EDUCATION (1-12)
PR: Admission to the Health Education Program. Supervised internship in the schools with scheduled seminars. (S/U only.)

HES 4942 FIELD EXPERIENCE IN HEALTH AGENCIES (3)
PR: Admission to the Health Education Program or CI. A field based introduction to the role and responsibilities of a health educator in a community health agency. (S/U only.)

HES 4943 FIELD EXPERIENCE IN HEALTH AGENCIES (8)
PR: Admission to the Health Education Program, HES 4143, HES 4700 (or Non-Cert), or CI. To be taken concurrently with HES 4750. Supervised field experience in selected health agency programs. (S/U only.)

HES 4945 INTERNSHIP (1-4)
Part-time internship in an accredited public or private school. To be taken concurrently with departmental requirements and will include beginning of year experiences when taken in Fall Semester. (S/U only.)

HES 4946 INTERNSHIP (1-2)
PR: Admission to the College of Education and/or departmental approval. Internship in an accredited public or private school which will include the end of the academic year or program closing. (S/U only.)

GRADUATE COURSES

HES 5238 HEALTH PROBLEMS OF SCHOOL AGE POPULATION (3)
A study of health problems and needs of school age students, including a health status screening laboratory.

HES 6125 FOUNDATIONS OF HEALTH EDUCATION (3)
Study of the factors which influence health behavior and the role and responsibilities of health education in the intervention process.

HES 6255 EDUCATIONAL TECHNIQUES FOR HEALTH EDUCATION (3)
PR: HES 6125. Study and application of techniques which facilitate learning of information to effectively influence health attitudes and behavior.

HES 6725 PROGRAM DEVELOPMENT AND EVALUATION IN HEALTH EDUCATION (3)
PR: HES 6125 or CI. Analysis, development, and evaluation of health education programs in various community settings.