3. Electives in Business or Non-Business

Sufficient electives courses to reach 120 hours
Total Hours 120

4. All business students are required to select at least one course that deals with contemporary international topics. This course can be included in the business, non-business, or elective category. Consult with a business advisor for suggestions on acceptable courses.

5. A grade-point average of 2.0 must be achieved in the major field, as well as in all USF work, for students to be certified for graduation. Students must have satisfactorily completed CLAST and the writing and computation course requirements of 6A-10.30 ("Gordon Rule"). For a Bachelor of Arts degree, students must pass the foreign language competency exam.

6. All courses in the major or minor field and all foundation courses in business must be taken on a graded basis; the S/U option is not available.

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

Student Advising and Records

The Office of Undergraduate Programs provides the following services for College of Business Administration students:
1. Academic advising and program information.
2. Orientation for undergraduate students applying for admission to the College of Business Administration. Orientation is mandatory prior to being accepted.
3. Registration and drop/add for business courses.
4. Evaluation of undergraduate transcripts of transfer students.
5. Maintenance of academic advising records for all admitted students.

PROGRAMS AND CURRICULA

GENERAL BUSINESS (GBA)

The General Business Major is a program of study that will allow the student to take additional upper level course work in several business and, in some instances, other disciplines related to the student's plan of study. Currently two tracks are available.

Requirements for the B.A./B.S. Degree

Within the 120 semester hour program as listed in the General Requirements section, students must complete a minimum of 18 hours of upper-level courses beyond the business core requirements.

Track 1 is the traditional general business track in which the student is required to take one upper level course from each of the following groups:

Accounting:
- ACG 3102 Intermediate Accounting I (4)
- ACG 3341 Cost Accounting and Control I (3)
- TAX 4001 Federal Taxes I (3)

Economics:
- Any course offered by the Economics Department numbered 3000 or above. (3)

Finance:
- Any course offered by the Finance Department numbered 3000 or above. Except FIN 3100 and FIN 3105. (3)

Management:
- MAN 3240 Organizational Behavioral Analysis (3)
- MAN 3401 Industrial Relations (3)
- ISM 3011 Management Information Systems (3)

Marketing:
- MAR 3823 Marketing Management(3)
- MAR 3613 Marketing Research (3)

Other upper level business electives (2-9)

TOTAL (18-24)

Independent study and independent research courses are not appropriate electives.

Track 2 is a Real Estate oriented track which requires 24 credit hours of multidisciplinary course work in business and economics as well as in urban planning, architecture, public administration and other related fields. Students interested in the Real Estate track should see a business advisor to obtain the detailed choices necessary to develop their plan of study.

ACCOUNTING (ACC)

The objectives of the baccalaureate degree program in accountancy are to provide students with accounting and business knowledge that will serve as a basis for careers in industry, government, non-profit organizations and public accountancy.

The baccalaureate program also prepares students for entry into the Master of Accountancy (M.Acc.) professional degree program. See CPA requirements in the state of Florida below.

Requirements for the B.A./B.S. Degree

Within the 120 semester hour program as listed in the General Requirements section, students must complete a minimum of 20 hours of upper level accounting courses.

Required Accounting Courses:
- ACC 3012 Intermediate Accounting I (4)
- ACC 3112 Intermediate Accounting II (4)
- ACC 3341 Cost Accounting and Control I (3)
- ACC 3401 Accounting Information Systems (3)
- TAX 4001 Federal Taxes I (3)
- ACG 4632 Auditing I (3)

Total (20)

Required non-business Courses:

One of the following:
- ENC 3210 Technical Writing
- ENC 3213 Professional Writing
- ENC 3310 Expository Writing
- GEB 3211 Business Communications (or other equivalent course)

One of the following:
- COM 3110 Communications for Business and the Professions
- SPC 2023 Fundamentals of Speech Communications (or other equivalent course)

The student's program must also include coursework in behavioral sciences and humanities, such as psychology, anthropology, and sociology, and the political environment of business and society, such as political science, public administration, and ethics. College of Business Administration advisors will recommend courses that will satisfy the program requirements.

Students planning to enroll in the M.Acc. Program should take TAX 4015, Federal Taxes II, as part of their required accounting courses resulting in a 23 hour major.

Accounting majors can use the forgiveness policy only once in
upper level accounting courses. Accounting courses taken by accounting majors on an S/U basis will not be counted toward the 120 hour graduation requirement. Independent Research, ACG 4911, will not be accepted as credit toward the minimum degree requirements in the accounting concentration.

Accounting majors must earn a "C" grade in each of the sequential upper-level accounting courses before being allowed to go on to the next course: i.e., ACG 3102, ACG 3341, ACG 4632, TAX 4001.

Students desiring to take the Uniform CPA Examination to practice as certified public accountants are required to have completed a five-year (150 semester hour) program of study.

Any further questions concerning the CPA examination should be directed to the faculty of the School of Accountancy.

ECONOMICS (ECN)

Economics offers a clear, logical way of thinking about complicated business problems and contemporary social issues such as controlling unemployment, inflation, pollution, and crime. The department offers both major and minor programs. Elective courses offered in industrial organization, labor economics, international trade, public finance, monetary economics, econometrics, history of economic thought, economic development, comparative economic systems, law and economics, as well as other areas, allow students to tailor their study towards careers in business, teaching, or government service. The economics curriculum also provides excellent preparation for those students seeking graduate or professional degrees in business, law, or social sciences. The basic courses and the elective offerings allow students in other disciplines to complement their studies with the skills and insights gained through understanding how the economy operates.

Students interested in majoring or minoring in economics should contact the undergraduate academic adviser in the Department of Economics for more information about the program.

Requirements for the B.A./B.S. Degree

Within the 120 semester-hour program as listed in the General Requirements section, students must complete a minimum of 18 hours of upper-level economics beyond the business core requirements. Students must obtain a grade of "C" or higher in ECO 3101, Intermediate Price Theory, in order to enroll in any course for which ECO 3101 or ECO 3203 is a prerequisite.

Required Economics Courses:

ECO 3203 Intermediate Income & Monetary Analysis (3)
ECO 4303 History of Economic Thought (3)
Additional upper-level economics courses (12)

At least 9 of the 12 hours of electives must be in courses for which either ECO 3101 or ECO 3203 is a prerequisite.

Total (18-24)

No more than 3 hours of credit can be applied toward a major from ECO 4905 and/or ECO 4914.

Requirements for a Minor in Economics

Students majoring in Business Administration, as well as students from other colleges may minor in Economics. The requirements are:

1. ECO 2023 Economic Principles (3)
2. Either ECO 2013 Economic Principles (Macroeconomics) (3) or ECO 3101 Intermediate Price Theory (3) or ECO 3203 Intermediate Income and Monetary Analysis (3)
3. Upper level economics electives (6)

Total Economics Hours (18)

(excluding the variable credit courses ECO 4905 and 4914) QMB 3200 Business and Economic Statistics II, or its equivalent, is acceptable for credit in the minor.

2. Before being recognized as a minor in economics, students must obtain approval of the courses involved in their minor program from the advisor in the Economics department.

3. 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.

4. At least 12 of the required 18 credits must be taken in residence at USF.

FINANCE (FIN)

The Finance program provides a broad-gauged analytical program for students anticipating a career in management of both large and small organizations. Students seeking a financial career in business, in financial institutions or careers in the fields of insurance, real estate, or financial planning should find the finance major particularly valuable. In addition, the program in finance is designed to provide the flexibility needed by students who seek professional degrees in areas such as law and public administration.

The Finance program offers applied and theoretical courses directed to the identification and solution of problems in the acquisition and allocation of funds by organizations in both the private and public sectors in both domestic and multinational settings. Finance relies on an interdisciplinary approach which draws on economic theory, accounting, information systems, and the quantitative decision framework of statistics and mathematics.

The required courses for finance majors focus on understanding the institutional environment and the analytical tools used by decision makers. Also included are concepts of capital budgeting, risk analysis, asset and liability management, and an examination of the economic, social, and regulatory forces affecting the decision-making process.

Requirements for the B.A./B.S. Degree

Within the 120 semester hour program as listed in the General Requirements section, students must complete a minimum of 18 hours of upper-level finance courses beyond FIN 3403.

Required Finance Courses:

FIN 3233 Money and Banking (3)
FIN 4414 Advanced Corporation Finance (3)
FIN 4504 Principles of Investments (3)
and either
FIN 4443 Financial Policies and Strategies (3)
or
FIN 4514 Advanced Investment Analysis and Management (3)

AND a minimum of 2 additional Finance electives from the following Approved list.

Total (18-24)

Approved List:

FIN 3604 International Finance (3)
FIN 4303 Financial Institutions (3)
FIN 4443 Financial Policies and Strategies (3)
FIN 4514 Advanced Investment Analysis and Management (3)

And other courses approved by the Finance Department Chair.

INFORMATION SYSTEMS AND DECISION SCIENCES (ISM)

The Management Information Systems (MIS) major provides the skills, knowledge and abilities necessary for information systems development and information systems management positions both in business and non-business organizations.

Requirements for the B.A./B.S. Degree

Students will typically enter the program at the beginning of their junior year. Within the 120 semester hour program listed in the General Requirements section, students must complete a set of three MIS courses which are required of all majors, nine hours of approved MIS electives and three additional non-business courses as indicated below.

Required MIS Courses:

ISM 3111 Systems Analysis (3)
ISM 3112 Systems Design (3)
ISM 4300 Managing the Information System Function (3)
Requirements for a Minor In MIS (for Business Majors only)

Students majoring in Business Administration may minor in MIS. The requirements are:

1. ISM 3111 Systems Analysis (3)
   ISM 3112 Systems Design (3)
   MIS electives approved by department chair (6)
   Total MIS hours (12)

2. A grade-average of 2.0 or better must be achieved in the minor coursework.
3. At least 9 hours of the required 12 credit hours must be taken in residence at USF.

MANAGEMENT (MAN)

The undergraduate degree in the Department of Management prepares students for entry level positions in Human Resource Management, Industrial Relations, and Small Business Management. It also prepares students for entry into graduate programs, such as the Master of Science in Management and the Master of Business Administration.

Requirements for the B.A./B.S. Degree

Within the 120-semester-hour program as listed in the General Requirements section, students must complete 18 hours of management beyond MAN 3025.

Required Management Courses:

- MAN 3240 Organizational Behavior Analysis (3)
- Additional upper-level management courses (15-21)
- Total (18-24)

MAN 4504 and MAN 4507 do not count towards the management major.

Non-Business Requirements

- ENC 3210 Technical Writing
- ENC 3213 Professional Writing
- ENC 3310 Expository Writing
- GEB 3211 Business Communications
  (or other equivalent course)

Students are encouraged to seek additional curriculum advice from the Management Department.

Requirements for a Minor in Management (For Business Majors Only)

Students majoring in Business Administration may minor in Management.

The Requirements are:

1. MAN 3240 Organizational Behavior Analysis (3)
   Management electives approved by department chair (9)
   Total Management hours (12)

2. A grade-average of 2.0 or better must be achieved in the minor coursework.
3. At least 9 hours of the required 12 credit hours must be taken in residence at USF.

MARKETING (MKT)

Marketing is a dynamic field with many dimensions, including product selection and planning, product distribution, pricing and promotion. Marketing poses many challenges and yields generous rewards for those meeting these challenges. Marketing operations are conducted domestically and internationally in virtually all business organizations offering a product or service. Many marketing concepts are applicable to the operations of non-profit organizations such as governmental, educational, and health care institutions as well as charitable and political campaign organizations.

Marketing operations provide the most visible links between the firm or institution and its many publics. Marketing in the end deals with people, people who are constantly changing in their needs, wants and desires; and coupled with these changing tastes is a fiercely competitive environment sustained by all the resources of a rapidly evolving technology. These forces lead to much of the challenge -- to much of the dynamic nature of marketing.

The marketing program at USF prepares students for initial entry and management positions in many areas of marketing with a curriculum that is concerned with:

1. Understanding consumer behavior and the broader environment within which the firm or institution operates;
2. Collecting, analyzing, and using information about customers, competitors, and the environment for managerial decisions;
3. Distributing products effectively and efficiently from producer to user;
4. Advertising and promoting the offerings of the firm or institution effectively;
5. Creatively and effectively managing a sales force selling industrial or consumer goods and services; and
6. Managing retail and wholesale operations including the conceptualization, implementation and evaluation of the buying, merchandising, and control functions.

Each student is strongly encouraged to set up his own plan of study with the assistance of a Marketing department faculty adviser. Such counseling can lead to a better definition of career objectives and will result in a plan of study that is consistent with each student's career objectives.

Undergraduate students not majoring in Marketing are encouraged to take selected offerings from the Marketing curriculum to broaden their backgrounds and to prepare for marketing-related positions in business or non-profit organizations.

Requirements for the B.A./B.S. Degree:

Within the 120-semester-hour program as listed in the General Requirements section, students must complete a minimum of 18 hours in marketing beyond MAR 3023.

Required Marketing Courses:

- MAR 3823 Marketing Management (3)
- MAR 3813 Marketing Research (3)
- MAR 4824 Marketing Management Problems (3)
- Additional upper-level marketing courses (9-15)
- Total (18-24)

It is strongly recommended that marketing majors include courses in speech, computer science, finite mathematics, social psychology, and mass communications as part of their general electives.

The following Marketing elective tracks are recommended for students with specific interests.
Industrial Marketing/Sales Management
MAR 4403 Sales Management
MAR 3103 Professional Selling
MAR 4453 Industrial Marketing
MAR 4503 Buyer Behavior

Promotion (Industrial and/or Consumer)
MAR 4333 Promotion Management
MAR 4503 Buyer Behavior
MAR 4933 Promotion Campaigns
MAR 3103 Professional Selling

Logistics and Physical Distribution (Industrial and/or Consumer and/or International)
MAR 4203 Channels Management
MAR 4213 Logistics and Physical Distribution Management
MAR 4453 Industrial Marketing
MAR 4231 Retailing Management and/or
MAR 4156 International Marketing

Retailing
MAR 4231 Retailing Management
MAR 4503 Buyer Behavior
MAR 4333 Promotion Management and/or
MAR 3103 Professional Selling
MAR 4213 Logistics and Physical Distribution Management

Other Campuses
Due to limited enrollment and faculty, only the following majors are regularly offered at the Regional Campuses:
- St. Petersburg
  Accounting, Management, and General Business Administration.
- Sarasota
  Accounting and General Business Administration.
- Fort Myers
  Accounting and General Business Administration.
- Lakeland
  Only limited courses available
  Students may declare other business majors while attending these locations, but it may be necessary to finish their major study requirements at another campus within the University.

Student Organizations within the College of Business Administration

All students are encouraged to participate in extracurricular activities. The following organizations provide a means for students to develop both professionally and socially while attending the College of Business Administration.

American Society of Personnel Management - Student chapter of the American Society for Personnel Administration designed for students interested in careers in human resource management.

American Student Production and Inventory Control Society - An organization which practices the art and science of production and inventory management. ASPICS's primary objective is to develop professional efficiency through study, research, and application of scientific methods. Professional meetings and publications promote the dissemination of knowledge and information.

Association of Marketing Students - A collegiate chapter of the American Marketing Association, will help to further the growth of business oriented individuals within the field of Marketing.

Beta Alpha Psi - The national professional accounting fraternity devoted to the promotion of the profession, inspiring professional ideals, and recognizing academic achievement.

Beta Gamma Sigma - Honorary society which encourages and rewards outstanding scholarship among business students.

Business Student Council - An organization whose representatives from each of the major fields advises the Dean of the College and the faculty on student attitudes and goals. Also, it acts as a liaison between the Student Government Association and the College of Business Administration.

Delta Sigma Pi - Fosters the study of business and a close association between students and the business world.

Economics Club - Provides a forum for discussion of economic issues and actively encourages communication between students and Economics faculty.

Iota Phi Lambda - A business and professional sorority designed to encourage the development of personalities for all areas of leadership.

Management Information Systems Society - Student chapter of the Data Processing Management Association, career oriented and interested in all areas of business data management.

Minority Students Organization - Encourages and supports students in their efforts to achieve success in a demanding academic setting.

Phi Chi Theta - A career oriented professional organization that encourages the study of business.

Pi Sigma Epsilon - A professional society interested in marketing, sales management, and selling.

Sigma Iota Epsilon - An honorary and professional management society affiliated with the Academy of Management.

Student Accounting Organization - Promotes accounting both as an academic discipline and as a profession.

Student Finance Association - An organization for finance majors and other business oriented students which provides exposure to the many facets and opportunities in the field of finance.
The College of Education places an emphasis on students learning what is relevant for the world today and on their getting deeply involved in their own thinking about themselves and their universe.

The College of Education is committed to a continuous and systematic examination of the professional program of teacher education. Promising programs are examined experimentally under controlled conditions, which make possible an objective appraisal of effects in terms of learning outcomes.

The University of South Florida follows a University-wide approach to teacher education. Its programs for the preparation of teachers represent cooperative effort in planning and practice by faculties of all academic areas. Courses needed by teacher candidates but designed also for other students are offered outside the College of Education. Courses in the University which are primarily designed for teacher candidates are taught by the College of Education faculty.

In the total teacher education program there is a special concern for developing in the student a deep interest in intellectual inquiry and the ability to inspire this interest in others.

BACCALAUREATE-LEVEL DEGREE PROGRAMS

Admission to the College

The College of Education administers the admission policies to all teacher programs of the University. All students who plan to teach must apply for admission to a teacher education program through the Student Personnel Office of the College of Education. Prospective secondary and K-12 teachers are enrolled in teacher education programs involving both the College of Education and various other colleges of the liberal arts areas.

Admission to an upper level teacher education program is contingent upon meeting the following minimum college requirements:

1. Completion of a College of Education application form.
2. Completion of the General Distribution requirements for Education majors. Provisional admission may be granted if no more than three individual General Distribution courses remain to be taken, provided Freshman English has been completed.
3. Completion of a minimum of 50 semester hours.
4. An overall minimum GPA of 2.5 on all attempted hours plus a minimum ACT score of 19 (enhanced ACT score of 20 or SAT score of 840) will be required for full admission to the College. An overall minimum GPA of 2.25 on all attempted work will be accepted for students with a 21 or higher ACT score (enhanced ACT score of 22 or SAT score of 940). Students must submit a score from the American College Test (ACT) or Scholastic Aptitude Test (SAT).

Admission to programs will be based upon the applicants' performance on either test. If the number of applicants exceed the capacity of a program preference will be given to students with higher scores.

Students who meet all other requirements but have not achieved minimum test scores or minimum GPA may be considered under Affirmative Action. The absolute minimum test scores for this process are prescribed by the College of Education.

5. Additional criteria established by each program. (See Admission to Programs below.)

Admission to Programs

Admission to some programs is based on additional selection criteria beyond the College requirements stated above. Some programs accept a limited number of students. Additionally, certain programs admit students only in a specified semester. Students should refer to the specific program descriptions in this catalog for additional admissions information. Information regarding admission requirements for the program(s) of your choice may also be obtained from the Student Personnel Office, College of Education.

Time Limitations

The College of Education will accept professional education and specialization coursework completed at this University or at other accredited institutions as follows:

1. Courses completed within the last five years will be accepted.
2. Courses completed over five years but less than ten years ago. For courses taught by College of Education faculty, approval from the appropriate departmental chairperson is required before credit is granted. For courses taught by other than College of Education faculty, approval from the chairperson of the department that requires the course is necessary.
3. Courses completed ten years ago or longer will count as elective credit only.

Admission to Internship Experience

The final internship experience is observing and teaching in elementary, secondary, or exceptional schools. Time, sequence, and location of experience may vary among the programs. (Refer to specific program for further information.)

Special requirements for enrollment in the final internship and seminar courses are:

1. Admission to the College of Education.
3. Completion of an application for the final internship before desired dates for applications to be submitted. The applications may be obtained in the Office of Clinical Education.
4. Completion of the professional education sequence except for measurement/special education/computers in education courses, a minimum of two thirds of specialization, no course work with less than a "C" grade, and a minimum of 2.5 grade point average in each area; or an overall 2.5 grade point average. The Elementary/Early childhood programs require a combined grade point average of 2.5 in professional education and specialization as well as an overall 2.5.
5. Acceptance by a school approved by the College of Education and the Florida Department of Education.
6. Completion of other requirements prescribed by the applicable program.

Applications for Fall Semester are due the preceding January 30. Applications for Spring Semester are due the preceding September 15.

Admission to Classes

The control of entry to all classes on all campuses will rest with the department chairperson. Each department will establish and publish priorities for allowing students to enroll in classes. Students not in attendance at the first class meeting will be dropped from the course.

College Requirements for Graduation

To be certified by the College of Education for graduation, a student must have earned 120 semester hours credit including the last 30 credit hours on campus. A minimum overall USF grade-point average of 2.5 or a minimum GPA of 2.5 in teaching specialization courses and a minimum GPA of 2.5 in the Professional Education sequence. The Elementary/Early Childhood programs require a combined grade point average of 2.5 in professional education and specialization as well as an overall 2.5. Satisfactory completion of the internship is also required. Prior to completion of the internship, the student must pass both the subject area and the Professional Education sections of the Florida State Teacher Certification Examination. A student must also have completed the major requirements in an approved teaching program (which includes general preparation, teaching specialization, and professional preparation). A minimum of 8 credits in professional courses in addition
COLLEGE OF EDUCATION

Florida Department of Education
Requirements for Teacher Certification

College of Education programs are reviewed by the Florida Department of Education. Those programs meeting the requirements of Chapter 6A-5, Rules of the State Board of Education of Florida, are given "Approved Program" status. These rules are subject to rapid changes and programs must change accordingly to maintain their "approved" status. Program requirements listed in this catalog are needed for graduation. To be eligible for a Florida Educator's Certificate, the student must complete all requirements listed on applicable current program checklist, complete the "Beginning Teacher Program" and pass all parts of the State Teacher Certification Examination.

Programs Leading to the Baccalaureate Degree

The College of Education* has programs leading to the Bachelor of Science degree in the following fields:

<table>
<thead>
<tr>
<th>Program</th>
<th>Department</th>
<th>Code</th>
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<tbody>
<tr>
<td>Art Education</td>
<td>Secondary Education</td>
<td>ARE</td>
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<tr>
<td>Behavior Disorders</td>
<td>Special Education</td>
<td>EED</td>
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<tr>
<td>Business and Office</td>
<td>Education</td>
<td>BTE</td>
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<td>Education</td>
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<td>DEC</td>
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<td>Distributive and</td>
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<td>EEC</td>
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<td>Marketing Education</td>
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<td>EDE</td>
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<td>Elementary/Early</td>
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<td>ENE</td>
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<td>Childhood Education</td>
<td>Secondary Education</td>
<td>FLS</td>
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<td>Elementary Education</td>
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<td>Mental Retardation</td>
<td>Special Education</td>
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<td>Music Education</td>
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<td>Vocal</td>
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<td>Physical Education</td>
<td>Professional Physical Education</td>
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<td>Wellness</td>
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<td>Secondary Education</td>
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<td>Physics</td>
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<tr>
<td>Social Science Education</td>
<td>Secondary Education</td>
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<td>Specific Learning Dis-</td>
<td>Special Education</td>
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See Departmental Section for specific program requirements.

* A B.A. degree may be awarded when competency in a foreign language is demonstrated.

Teacher Education Program

There are three distinct areas in the teacher education program, and all teacher candidates must meet certain minimum requirements in each. The three areas and their requirements are as follows:

1. General Distribution Requirements
   (40 credit hours)

   The five areas of General Distribution and the specific requirements are as follows:

<table>
<thead>
<tr>
<th>Area I</th>
<th>English Composition:</th>
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<tbody>
<tr>
<td></td>
<td>ENC 1101 and ENC 1102</td>
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</tbody>
</table>

   | Area II | Fine Arts and Humanities: |
A minimum of six hours of selected courses (i.e., course must include the writing requirement) from any two of the following departments: American Studies, Art, Classics, Dance, English, Foreign Languages, Humanities, Music, Philosophy and Theatre.

**Area III**
Mathematics:
A minimum of six hours. MAC 2102/MGF 2202 or more advanced courses offered by the Mathematics Department. Logic, Statistics and selected Engineering computer courses are acceptable for three hours of the requirement.

**Area IV**
Natural Sciences:
A minimum of six hours of courses offered by the Departments of Astronomy, Biology, Chemistry, Geology, or Physics.

**Area V**
Social and Behavioral Sciences
a. For EDE and EEC majors, two American History courses, or one American History and one American National Government course. One of these must be AMH 2010 or 2020 or the equivalent.

2. Professional Education Core (36-45 credit hours)
The required courses in the professional education core are as follows:

- **EDF 3122** Learning and the Developing Child (For Elementary or Early Childhood Majors) (4)
- **EDF 3214** Human Development and Learning (3)
- **EDF 3604** Social Foundations of Education (3)
- **EDF 3542** Philosophy of Education (4)
- **EDG 4620** Curriculum and Instruction (3)
- **EDF 4430** Measurement for Teachers (3)
- **EME 4402** Intr. to Computers in Ed (2)
- **EEX 4070** Exceptional Student Ed (2)
- **Methods Course(s)** (4-6)
- **Internship and Seminar** (12)***
- **Reading Requirement** (2-3)

**DEPARTMENTS AND PROGRAMS**
The College of Education is organized into 11 departments. Each department has one or more programs which are listed alphabetically in the following departmental section.

**Department of Adult and Vocational Education**
The Adult and Vocational Education Department at the University of South Florida offers degrees through the College of Education designed to prepare teachers and leaders in the various fields of Vocational Education. Certification programs leading to the Bachelor of Science (B.S.) degree are: Business and Office Education, Distributive and Marketing Education, and Industrial-Technical Education.

**BUSINESS AND OFFICE EDUCATION Requirements for the B.S. Degree (BTE):**
General Distribution and Professional Education requirements are listed under Teacher Education Program.

In Business Education specific program competencies in the specialization must be demonstrated through satisfactory completion of competency examinations. Prospective majors should schedule these examinations as early as possible and no later than the first semester of the junior year. The competency examinations may be repeated.

Two semesters of full-time residency must be planned with an adviser and sequenced in the senior year. Special prerequisites are required for BTE 4360 and BTE 4364, which are taken concurrently in the semester immediately prior to the supervised internship.

**Specialization Requirements (43 cr. hrs.):**
- Accounting (2 courses)
- Economics (2 courses)
- Typewriting Competencies
- Shorthand Competencies (Theory 50 CWPM)
- Administrative Office Management
- Electives (6 cr. hrs. approved by advisor)

**DISTRIBUTIVE AND MARKETING EDUCATION Requirements for the B.S. Degree (DEC):**
General Distribution and Professional Education requirements are listed under Teacher Education Program.

Specialization (42 credit hours):

- **ACG 2001**
- **DEC 4941**
- **ECO 2013**
- **MAR 3023**
- **DEC 4161**
- **ECO 2023**
- **MAR 4403**
- **MAR 3823**
- **EVT 4065**
- **FIN 2100**
- **FIN 2105**
- **MAR 4231**
- **MAR 4333**

Distributive and Marketing Education undergraduates are required to accumulate a total of five (5) hours of credit in DEC 4941 Supervised Field Experience. Students will enroll for a minimum of two (2) semester hours the first semester they enter the program and for at least one (1) semester hour each subsequent semester, not to exceed a total of five (5) hours. Students may not enroll in more than two (2) credit hours of field experience in any one semester. The five (5) credit hours of field experience will be used for individual and group assignments and projects to round out and broaden the vocational background of the student to properly fulfill certification requirements. Students will also be able to receive credit for participation in the professional activities of the Delta Epsilon Chi, chapter of the Distributive Education Clubs of America, which is an integral part of the Distributive and Marketing Education teacher preparation curriculum.

**INDUSTRIAL/TECHNICAL EDUCATION Requirements for the B.S. Degree (EVT):**
General Distribution and Professional Education requirements are listed under Teacher Education Program.
Enrollment in the Industrial-Technical Education program is restricted to persons with employment experiences qualifying them to teach Industrial, Technical, Health Occupations, or Public Service. Special provision is made for students to satisfy four (4) of the required six (6) years of work experience in a specific occupation by completing an Associate in Science degree program in a technological specialty from one of the State Community Colleges or successfully completing an appropriate occupational competency exam.

Acceptability of work experience will be determined by the program advisor.

Students may validate up to 30 semester hours of credit through the Occupational Competency Testing Program, or appropriate licensure or certificate.

Required: Twelve (16) semester hours.

EVT 4065 EVT 4165 *EIV 4210 EVT 4562

*Another course may be substituted with advisor's approval.

Within the EVT program, students can pursue state certification in technology Education. In general, students enrolling into the Technology Education program are expected to have successfully completed, at a community college, most of the technical laboratory courses required for Florida Teachers Certification. Teacher certification requires students to have 30 semester hours, with three (3) semester hours in each of the following areas:

(a) materials and processes, (b) drafting and design, (c) energy, (d) graphics, (e) electronics, (f) construction, and (g) industrial systems.

Students entering this program will have their transcripts evaluated to determine if all technical course requirements have been met. If the student has not completed the technical course requirements, the deficiencies will be corrected by enrolling into the required course(s) at a community college. Since this evaluation procedure is unique to the Technology Education Program, the application for admission should clearly indicate the desired major field as Technology Education.

The program of studies includes both course work and extensive field experience in school settings. This is to enable students to integrate theory with teaching practice.

Technology Education students must complete the General Distribution Requirements of 40 semester hours, the Professional Education Core Requirements of 40-41 semester hours, the Technical Course Requirements of 30 semester hours, and 12 semester hours in Adult and Vocational Education. The requirements in Adult and Vocational Education are as follows:

Required: Twelve (16-20) semester hours including;

EVT 4065 EIV 4210 EVT 4165

Plus electives selected with advisor approval.

### Department of Childhood/Language Arts/Reading Education

The Childhood/Language Arts/Reading Education department has the responsibility for the development and supervision of programs leading to the Bachelor of Science degree in Elementary/Early Childhood Education and Elementary Education.

Prerequisites for admission to the Elementary/Early Childhood program include two American History courses, or one American History and one American National Government course. One of these must be AMH 2010 or 2020 or the equivalent. These courses may be taken as part of the general distribution requirement.

### Elementary Education Certification Programs

Students may complete a program of studies to be eligible for certification in either Elementary or Elementary-Early Childhood Education. The program of studies includes both coursework and extensive field experiences in a school setting to enable students to integrate theory with teaching practice. Upon successful completion of the required courses and the associated internships, Elementary majors will be eligible to apply for certification in grades one through six. Elementary-Early Childhood majors will be eligible to apply for certification for kindergarten through 6th grade upon completing the requirements of this program. Students electing to pursue either the Elementary or the Elementary-Early Childhood major will be assigned to a specified sequence of courses to be followed throughout the program enrollment. This sequence includes two semesters of part-time field experience and one semester of full-day internship. All part-time internship courses must be successfully completed as a member of an internship team in designated local schools under the supervision of a faculty team leader. One of these part-time internships is scheduled to be completed in the first semester of the student's enrollment. A second half-day in-school experience occurs during the senior year when the majority of coursework has been completed just prior to enrollment in the full-day internship. Students who withdraw from Level I or Level II Internships, or who make an unsatisfactory grade, must petition the department Professional Standards Committee before they will be allowed to repeat either internship.

Elementary and Elementary-Early Childhood majors are required to complete a concentration of 15 hours in one of the following areas: English, Mathematics, Science, Social Science, or Foreign Language.

Students must have an overall USF GPA of 2.5 and a GPA of 2.5 in the combined Professional Core and Teaching Specialization prior to internship and graduation.

Prior to internship, students can have no more than five (5) courses remaining from the following courses, only one (1) of which can be taken with the final internship:

- EDF 4430
- EEX 4070
- EME 4402
- ARE 4313
- HLP 4722
- MUE 4210

Part-time students (students planning to take 9 hours or less per semester) must participate in a modified program schedule and plan to meet internship requirements associated with the programs. These requirements include being available to participate in the internships during regular school hours as specified in the modified program.

### Internships

The Elementary and Elementary-Early Childhood preschool teacher education programs require all students to complete a sequence of internship courses beginning with the student's first semester of program enrollment. The sequence of internships for the Elementary and Elementary-Early Childhood Certification Program is as follows:

- **First Semester**
  - EDE 4941-Childhood Education of Program Enrollment
  - Internship Level I (4 semester hours)
- **Fourth Semester of Enrollment or Consent**
  - EDE 4942-Childhood Education of Department Chairperson (6 semester hours)
  - EDE 4940-Internship of Department Chairperson (10 semester hours)
  - EDE 4936-Senior Seminar (2 semester hours)

**Total 22 semester hours**

### ELEMENTARY EDUCATION

#### Requirements for the B.S. Degree (EDE):

General distribution and Professional Education requirements are listed under Teacher Education Program. The Elementary program also includes the following methods course in the Professional Education requirements:

- EDE 4301

The major consists of 32 semester hours of elementary specialization courses as follows:

- ARE 4313
- LAE 4414
- MUE 4210
- RED 4310
- HLP 4722
- MAE 4310
- SCE 4310
- RED 4511
- LAE 4314
- MAE 4326
- SSE 4313

Students are advised that the Elementary Education specialization will require an enrollment of more than the traditional four semesters of the junior and senior years in order to complete the program specialization courses and the required sequence of internship.
**ELEMENTARY/EARLY CHILDHOOD EDUCATION**

Requirements for the B.S. Degree (EEC):

General Distribution and Professional Education requirements are listed under Teacher Education Program. The Elementary/Early Childhood program also includes the following methods course in the Professional Education requirements:

- **EDE 4301**

Students interested in early childhood teaching, which includes children ages 3-8, should pursue a program leading to eligibility for Florida certification both in early childhood and elementary education (N-6).

The major consists of 42 semester hours of Elementary/Childhood Education specialization courses as follows:

- **ARE 4313**
- **HLF 4722**
- **MUE 4210**
- **RED 4310**
- **EEC 4203**
- **LAE 4414**
- **SCE 4310**
- **RED 4511**
- **EEC 4303**
- **MAE 4310**
- **SSE 4313**
- **EEC 4706**
- **MAE 4326**

Students are advised that the Elementary/Early Childhood specialization will require an enrollment of more than the traditional four semesters of the junior and senior year in order to complete the program specialization courses and the required sequences of internships.

*Due to changes in the State's teacher certification requirements, students are not currently being admitted to this program.*

**Department of Secondary Education**

General Distribution and Professional Education requirements are listed under Teacher Education Program.

The following programs are housed in the Department of Secondary Education:

- Art Education
- English Education
- Foreign Language Education
- Mathematics Education
- Science Education
- Social Science Education

The undergraduate programs are designed to prepare students to meet Florida teacher certification requirements and to become highly competent secondary teachers. Specialized courses in the teaching of mathematics, science, and social science are also offered for students majoring in elementary, early childhood, and special education.

Internship Program: The Department of Secondary Education internships are offered in the fall and spring terms.

**ART EDUCATION (ARE):**

Requirements for the B.S. Degree

At the time of application to upper level, each Art Education student must submit slides or portfolio to the head of the department. To assist transfer students in selection of courses, they must submit work prior to or during registration.

After completing studio requirements for state certification each student may elect to emphasize painting, sculpture, graphics, ceramics, or photography/cinematography for the remaining studio electives.

In addition to the general distribution and professional education requirements, the following courses constitute a program of study:

- **Art Education (15 credit hours)**
  - ARE 3044
  - ARE 4443
  - ARE 3354
  - ARE 4440
  - ARE 4642

In these courses students will have the opportunity to work at the elementary school and high school levels.

**Specialization (36 cr. hours)**

- **ART 2202C**
- **ART 3110**
- **ART 3510**
- **ART 2203C**
- **ART 3701**
- **ARTH 4450**

One of the following: **ART 3420** or **ART 3470**

ART Studio Electives approved by adviser

**ART History Elective**

**ENGLISH EDUCATION (ENE):**

General Distribution and Professional Education requirements are listed under Teacher Education Program.

1. **ENGLISH:**
   - A minimum of 39 semester hours, including:
     - **CRW 2100, ENC 3310,** and **LAE 4416**
   - One of the following:
     - **EDG 4320** or **MMC 3602**
   - One of the following:
     - **ENG 3105** or **LIT 3073**
   - One of the following:
     - **ENL 3331** or **ENL 3332**
   - One of the following:
     - **LIN 4340** or **LIN 4370**
   - One of the following:
     - **ORI 3000** or **SPC 2023**
     - **ENL 3015, ENL 3230, ENL 3250,** or **ENL 3273**
     - **LIT 3101, LIT 3102,** or **LIT 3144**
     - **LIN 3910, LIN 3901,** or **LIN 4100/5107**
   - Two of the following:
     - **AML 3031, AML 3032,** or **AML 3051**

2. **ENGLISH EDUCATION:**
   - Nine semester hours in methods of teaching English at the middle and secondary levels: **LAE 4355, LAE 4530,** and **LAE 4842.** **LAE 4530** must be taken concurrently with one of the other methods courses, the fall or spring immediately preceding internship.

**FOREIGN LANGUAGE EDUCATION (FLS):**

General Distribution and Professional Education requirements are listed under Teacher Education Program. A minimum of 30 credit hours beyond intermediate course requirements must be earned in the foreign language.

Programs available for Spanish, French and German.

1. **Foreign language** (30 credit hours)
   - grammar, conversation, composition 12
   - literature 6
   - culture 6
   - linguistics 3
   - language elective 3

2. **Foreign Language Education**
   - 9 credit hours in methods of teaching a language at the elementary and secondary levels, including a practicum.
   - Fall Term: **FLE 4314**
   - Spring Term: **FLE 4333** and **FLE 4334**

**MATHEMATICS EDUCATION (MAE):**

Admission Requirements: In addition to the College requirements, students must complete **MAC 3311** or an equivalent course.

General Distribution and Professional Education requirements are listed under Teacher Education Program.

1. **Mathematics:**
   - 38 semester hours in mathematics above the 2000 level. Required courses are:
     - **MAC 3311**
     - **MAD 3100**
     - **MHF 5405**
     - **MAC 3312**
     - **MAS 3103**
     - **MTG 4212**
     - **MAC 3313**
     - **MAS 4301**
     - **STA 3023**
     - **CGS 3422**
     - **MAS 5215**

Plus the following:
   - Two hours from either Music or Dance curricula or from the Theater Department, and one aesthetics or one art criticism course.
2. Mathematics Education:

Eleven hours in teaching mathematics at the secondary level.

Required courses are:

- MAE 4320
- MAE 4551
- MAE 4330
- CGS 4010

**SCIENCE EDUCATION (NSB, NSC, NSP):**

Admission requirements: In addition to the College requirements, the minimum requirement for acceptance into a program is the completion of 18 semester hours of required science courses. General Distribution and Professional Education requirements are listed under Teacher Education Program.

Course Requirements:

1. **SCIENCE**
   - A minimum of 32 semester hours in the discipline of major concentration (Biology, Chemistry, or Physics) and a minimum of 16 semester hours within the natural sciences outside the concentration area.

2. **SCIENCE EDUCATION**
   - As a minimum, satisfactory completion of the following courses: PHI 3404, SCE 4305, SCE 4320, and SCE 4330. These courses deal with philosophy of science, communication skills and the teaching of science at the middle grades and secondary school levels. In addition, a Physics major will need a three credit hour course in computer applications in science.

**SOCIAL SCIENCE EDUCATION (SSE):**

General Distribution and Professional Education requirements are listed under Teacher Education Program.

Course Requirements:

1. **SOCIAL SCIENCE:**
   - A minimum of 40 semester hours, including:
     - ECO 2023
     - GEO 3014
     - EUH 2030
     - ECO 2013
     - AMH 2010
     - EUH 2031
     - GEO 3013
     - AMH 2020
     - POS 2041
     - One of the following:
       - AFH 3100 or LAH 3200
     - One of the following:
       - POS 2112
       - POS 3142
     - One of the following:
       - SYG 3010
       - SYO 3500
       - SYP 3000
       - SYD 4410
     - SYP 5405

2. **SOCIAL SCIENCE EDUCATION:**
   - Eight semester hours in methods of teaching and communication skills in Social Studies: SSE 4333, SSE 4334, and SSE 4640.

**Department of Educational Measurement and Research**

The Department of Educational Measurement and Research provides support services for undergraduate programs. Students in all programs are required to take EDF 4430, Measurement for Teachers. This course develops skills and understandings related to test construction, reporting student progress, test score interpretation, measurement characteristics, and measurement as an information resource.

**School of Library and Information Science**

Even though degree-oriented undergraduate study is not offered in the School of Library and Information Science, the faculty will counsel those undergraduates interested in study in librarianship at USF. The library and information science Master's program is accredited by the American Library Association, and graduates are prepared for professional positions in all types of libraries and media centers.
MUE 3460(1)* or MUE 3461(1)*
MUE 4311(3) MUE 4352 (2) MUE 4331(3)**
One hour courses must be repeated to achieve 16 cr. hrs.
*As determined by audition.

Music courses (min. 56 cr. hrs.)
MUT 1111 (3) MUT 2116 (3) MUL 2111 (3)
MUT 1112 (3) MUT 2117 (3) MUH 3300 (2)
MUT 1241 (1) MUT 2246 (1) MUH 3301 (3)
MUT 1242 (1) MUT 2247 (1) MUH 3302 (3)
MUG 3101 (2)
Applied Music (Principal) 12 cr. hrs. with a minimum of 4 hours at the 3000 level and concurrent registration in MUS 3001 (Recital Attendance).
Applied Music Secondary Techniques (2 cr. hrs.)
(one each: string, percussion)
Major Ensembles
(Minimum of one per semester of applied music - 6 cr. hrs.)
Music Electives (7)
Graduating recital
Other Fine Arts Requirement
Art, Dance, Theatre (min. 3 cr. hrs. to be selected from one or more of the other departments in the College of Fine Arts)
3. General Music Specialization (72 cr. hrs.)
Music Education courses (16 cr. hrs.)
MUE 3460(1)* or MUE 3461 (1)*
MUE 3450(1)* or MUE 3451(1)*
MUE 2090(2) MUE 4352(2) MUE 3421(2)
MUE 4311(3) MUE 3422(1) MUE 3423(1)
One-hour courses must be repeated to achieve 16 cr. hrs.
*As determined by audition.

Music Courses (min. 56 cr. hrs.)
MUT 1111(3) MUT 2116(3) MUL 2111(3)
MUT 1112(3) MUT 2117(3) MUH 3300(2)
MUT 1241(1) MUT 2246(1) MUH 3301(3)
MUT 1242(1) MUT 2247(1) MUH 3302(3)
MUG 3101(2)
Applied Music (Principal) 12 cr. hrs. with a minimum of 4 hours at the 3000 level and concurrent registration in MUS 3001 (Recital Attendance).
Applied Music Secondary Techniques (2 cr. hrs.)
(one each: string, percussion)
Major Ensembles
(Minimum of one per semester of applied music-6 cr. hrs.)
Music electives (7)
Graduating recital
Other Fine Arts requirements
Art, Dance, Theatre (min. 3 cr. hrs. to be selected from one or more of the other departments in the College of Fine Arts)

Department of Physical Education

The Department of Physical Education teaches a variety of Elective Physical Education courses and conducts a Professional Physical Education Program.

[Section for ELECTIVE PHYSICAL EDUCATION PROGRAM]

Elective Physical Education offerings in the College of Education are designed to provide opportunities for all students in developing desired skills and gaining insight into the role physical activity plays in their lives. Laboratory experiences in recognized sports activities allow students to select and develop proficiency appropriate for leisure pursuit or personal development. Human movement behavior and response courses expand personal awareness of the effect of physical activity through examination of the interaction between the needs and abilities of the person and the requisites and uses of the activity. Special competency courses prepare interested students with skills and techniques applicable for conducting or directing community activities related to sport and movement.

[Section for PROFESSIONAL PHYSICAL EDUCATION PROGRAM]

Students must choose one of the following programs: a) Physical Education Grades K-8 (Florida Teacher Certification); b) Physical Education Grades 6-12 (Florida Teacher Certification); or c) Wellness Leadership (Non-certification).

Requirements for the B.S. Degree (PTE/PTS/PTW)

The two-year program is offered beginning in the junior year and includes mandatory attendance during the summer session between the junior and senior years.

In order to be admitted to the Program, all students residing within the State of Florida must participate in a selective admissions procedure. Out-of-state students should contact the Department Chairperson for admission information. Enrollment in the Program is limited and students can only enter during Semester I of each year.

In addition to applying to the University, all students must apply directly to the Department before May 1 for priority admission consideration. Students applying after May 1, and before the final deadline of June 1, will be accepted only on a space-available basis. Requests for admission to the Program should be directed to:

Chairperson
Department of Physical Education
College of Education
University of South Florida
4202 E. Fowler, PED 214
Tampa, Florida 33620-8600

Course Requirements:

1. PROGRAM PREREQUISITES FOR ALL TRACKS:
   APB 3190 Human Anatomy & Physiology
   HSC 2400 First Aid

2. CORE COURSES FOR ALL TRACKS:
   EME 4402 Introduction to Computers In Education
   PEQ 3101 Aquatics
   PET 3012 Personal/Professional Development Seminar
   PET 3310 Kinesiology
   PET 3351 Exercise Physiology I
   PET 3422 Instructional Design & Content: Movement Experiences
   PET 4222 Care & Prevention of Physical Injuries

3. ADDITIONAL REQUIRED COURSES FOR K-8 TRACK: (PTE)
   EDF 3122 Learning & The Developing Child
   EDF 4430 Measurement for teachers
   EDF 3804 Social Foundations of Education
   PET 3031 Motor Development & Assessment
   PET 3421 Curriculum and Instruction in Physical Education
   PET 3441 Instructional Design & Content: Middle School
   PET 3640 Adapted Physical Education
   PET 3799 Career Decision Making & Professional Ethics
   PET 3943 Physical Education Internship: Middle School
   PET 4141 Trends & Tasks: Elementary Physical Education
   PET 4401 Organization and Administration of Physical education Programs
   PET 4432 Instructional Design & Content: Physical Education Elementary
   PET 4433 Instructional Design & Content: Physical Education Elementary II
   PET 4934 Senior Seminar in Elementary Physical Education
   PET 4942 Physical Education Internship: Elementary
   PET 4946 Associate Teaching Physical Education: Elementary
4. ADDITIONAL REQUIRED COURSES FOR 6-12 TRACK: (PTS)

EDF 3604 Social Foundations of Education
EDF 4430 Measurement for teachers
EDF 4131 Learning and the Developing Adolescent
EX 3640 Adapted Physical Education
PET 3031 Motor Development & Assessment
PET 3421 Curriculum and Instruction in Physical Education
PET 3441 Instructional Design & Content: Middle School Physical Education
PET 3799 Career Decision Making & Professional Ethics
PET 3943 Physical Education Internship: Middle School
PET 4142 Trends & Tasks: Secondary Physical Education
PET 4304 Principles & Issues in Coaching
PET 4401 Organization & Administration of Physical Education Programs
PET 4442 Instructional Design & Content: Physical Education Secondary
PET 4443 Instruction Design & Content: Physical Education Secondary II
PET 4933 Senior Seminar in Secondary Physical Education
PET 4944 Physical Education Internship: Secondary
PET 4947 Associate Teaching Physical Education: Secondary

5. ADDITIONAL COURSES REQUIRED FOR WELLNESS LEADERSHIP TRACK: (PTW)

ADE 4304 Working with the Adult Learner
GEX 3601 Behavior Change in Later Life
GUN 3201 Nutrition
PEP 3940 Practicum in Health Promotion/Wellness
PEP 3951 Communication Skills for Wellness Leaders
PEP 4941 Wellness Internship
PEQ 3170 Aquatic Exercise
PET 3080 Survey of Wellness Programs
PET 4404 Organization & Administration of Wellness Programs
PET 4553 Exercise Physiology II
PET 4584 Health Fitness Appraisal & Exercise Prescription

In addition to the above courses, students in the Wellness Leadership Track are required to take a minimum of eight hours of the following elective courses which are activity courses related specifically to those found in Wellness Programs. These courses can be taken any time during the two years.

PEM 2116 Figure Development
PEM 2131 Weight Training
PEM 2141 Aerobics (Jogging)
PEM 2930 Aerobic Dance
PEM 2930 Cycling
PEM 2930 Advanced Jogging
PEM 2930 Triathlon
PEM 2930 Swim Aerobics
PEM 3931 Teaching Aerobic Exercise

Department of Psychological and Social Foundations of Education

The Department of Psychological and Social Foundations of Education provides courses for all students majoring in the wide array of undergraduate programs available in the College of Education. These courses contribute to the students' understanding of the general education enterprise and are considered foundational to later professional specialization.

EDF 3122 EDF 3542 EDF 4905 EDF 5672
EDF 3210 EDF 3804 EDF 4909 IDS 3115
EDF 3214 EDF 3810 EDF 5136
EDF 3228 EDF 4131 EDF 5265

Department of Special Education

The Department of Special Education undergraduate programmatic structure is designed to prepare personnel to plan and implement education programs for students requiring specialized education services. Areas of training include behavior disorders, mental retardation, 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 appropriate programs for exceptional students in public schools and private agencies. All students will be required to complete a concentration of 15 hours in one of the following areas: English, Mathematics, Science, Social Science, or Foreign Language.

There are basic entrance requirements at this level of the program. When the candidate has met the requirements for his/her program admission, a departmental adviser 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 students. The professional development of degree candidates is stressed. Membership and active participation in student professional groups such as the Student Council for Exceptional Children (SCED) is expected of all baccalaureate degree candidates. The prospective student is encouraged to contact the department for any program changes.

BEHAVIOR DISORDERS

Requirements for the B.S. 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.

General Distribution and Professional Education requirements are listed under Teacher Education Program.

Teaching Specialization: (33 hours)

EEX 3010 EEX 4221 EEX 4243
EED 4011 EED 4321 MAE 4310
LAE 4414 RED 4511 RED 4310

One of the following:

EEX 4706 SPA 4000

One of the following:

ARE 4313 MUE 4210 SCE 4310 SSE 4313

MENTAL RETARDATION

Requirements for the B.S. 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.

General Distribution and Professional Education requirements are listed under Teacher Education Program.

Teaching Specialization: (36 hours):

EED 4011 EEX 4243 EMR 4310 RED 4310
EEX 3010 EMR 3011 MAE 4310
EEX 4221 EMR 4230 LAE 4414

One of the following:

ARE 4313 MUE 4210 SSE 4313
SCE 4310

One of the following:

EEX 4706 SPA 4000

SPECIFIC LEARNING DISABILITIES

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

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

General Distribution and Professional Education requirements are listed under Teacher Education Program.

Teaching Specialization: (39 hours):

EED 4011 EEX 4243 MAE 4310 RED 4310
EEX 3010 ELD 4011 MAE 4510 RED 4511
EEX 4221 ELD 4110 LAE 4414
Student Organizations and Activities

College of Education Student Council

The College of Education Student Council represents the interests of education majors in regard to policies and needs of the college. The council leadership team consists of three officers (President, Vice-President, Secretary-Treasurer) and eight Student Government Senators. Elections are held annually in November and all education majors are eligible to vote for all officers.

C.E.S.C. activities enhance members' professional skills, communication skills and organization skills. Any student majoring in education with a minimum GPA of 2.0, is eligible to participate in C.E.S.C.

Association for Childhood Education International

The Association for Childhood Education is a non-profit professional organization concerned with the education and well-being of children two to twelve years of age. Members are located throughout the United States and other countries.

The USF chapter works directly with children through observation, projects, and programs. In addition, it provides opportunity for students to attend study conferences throughout the state of Florida which allows the student an opportunity for professional growth and exchange of professional ideas. Membership is open to all students, including freshmen, concerned with children two to twelve years old.

Student Council for Exceptional Children

The Student Council for Exceptional Children is an organization of those members of the University interested in the education of the exceptional child. Various exceptionalities included are Gifted, Emotionally Disturbed, Physically Handicapped, Mentally Retarded, and Culturally Different.

Activities of the USF Chapter include field trips to various special educational facilities, prominent speakers, seminars, state and national conventions, and social events. The specific activities are determined by the members and the exceptionalities in which they are interested. All interested students are invited to join.

Student Music Educators National Conference

Student Music Educators Conference is an affiliate of the Music Educators National Conference and the Florida Music Educators Association. It is devoted to the furtherance of knowledge and understanding of music education on all levels. Membership is open to any student in the University of South Florida who is interested in the teaching of music.

National Education Association Student Program

The National Education Association student program is designed to provide professional growth opportunities, leadership training and membership benefits that are available to other members of the National Education Association, including $1 million liability insurance coverage while engaged in student teaching internship. Membership is open to all students.

Phi Beta Lambda

Phi Beta Lambda is a business fraternity open to all students, including freshmen, expressing an interest in Business. The emphasis is on promoting free enterprise and instilling leadership qualities.

Kappa Delta Pi

Kappa Delta Pi is an international co-educational honor society in Education. The society was founded to recognize and encourage excellence in scholarship, high personal standards, improvement in teacher preparation, and distinction in achievement.

Physical Education Association (PEA)

The Physical Education Association (PEA) is open to all students enrolled in the Physical Education Program. Social and professional meetings are conducted throughout the year to promote interaction within the organization.

Mathematics Education Club

The role of this organization shall be to provide an informative and supportive environment for all members, encourage scholarship, and provide a helpful atmosphere for students progressing through the Mathematics Education program.

Membership shall be available to any student in good standing who expresses interest in the Mathematics Education program at the University of South Florida.

Association for Library and Information Students

This is a professional organization associated with the Library, Media, and Information Studies Department and is open to all members of the university community interested in librarianship.

The USF group provides programs and guest speakers of interest to the campus community and publishes a newsletter for its members. It is the official voice of students in the department and members of the association are included on faculty-student committees within the department.

Delta Epsilon Chi of America (DECA)

The College Chapter of DECA is an integral part of the Distributive and Marketing Education and Marketing Teacher Preparation Program at the University of South Florida and provides Distributive Education majors with leadership opportunities, social experience, learning activities and professional involvement. The participation in the activities of Collegiate DECA is required of undergraduate majors and is encouraged for graduate students.

Minority Organization of Students In Education

The Minority Organization of Students in Education is organized to provide experience and opportunities that will facilitate the educational and professional growth of its members.

Science Education Association (SEA)

The Science Education Association provides a supportive environment for students majoring in science education, although membership is open to anyone interested in science. SEA plans field trips, guest speakers, and the compiling of a classroom science activities file for education majors.
The College of Engineering offers undergraduate and graduate programs to prepare students for a broad spectrum of professional careers in engineering. The undergraduate programs of the College are designed to provide students with a sense of human values and the scientific/technical foundation necessary for a lifetime of continued learning.

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 (B.S.E.)
- 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 (B.S.E.S.)

These programs have as their foundation a 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 specialization studies in a designated field under the direction of one of the College's administrative departments.

Students interested in particular programs offered by the College should direct their inquiries to the College of Engineering. Prospective students considering engineering at the University of South Florida who lack a college algebra background either at this or other institutions should familiarize themselves thoroughly with the College's admissions 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.

Preparation for Engineering

Students planning to attend USF's College of Engineering should familiarize themselves thoroughly with the College's admissions standards and requirements, which are more stringent than the University's minimum entrance requirements.

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. However, 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 interested in design and research 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 professionals are 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 refurbishing 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 degree program (in a designated engineering field which requires 136 semester hours) and the Master of Science degree in the same field may be pursued simultaneously in a program of 186 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 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 specialization studies in a designated field under the direction of one of the administrative departments of the College.

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 5-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.

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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.

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. As another alternative, students may wish to avail themselves of the State's system of junior/community colleges which offer a wide range of remedial coursework, and many of which also offer full programs in pre-engineering (first two years' coursework). The University of South Florida generally offers most required pre-engineering courses every semester.

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 coursework as is available to them. Transfer students should be aware that the College expects them to meet its admission requirements listed in this section under college regulations for graduation just as it expects its own students to meet these requirements. Junior/commu-

PROFESSIONAL ENGINEERING

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 programs include 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 students specialization (option) of sufficient depth to prepare him/her to successfully embark on a professional career.
Admission to Programs In Engineering:

Once a student has been admitted to the College of Engineering, he/she must then seek admission into one of the specific departments. There are two methods by which a student may be admitted to a particular department: (1) Regular Departmental Admission (RDA), and (2) Direct Departmental Admission (DDA). Each is described below.

Admission to the College of Engineering does not imply that the student has been accepted as a degree-seeking student by a specific Engineering department. Due to limited facilities and resources, it is necessary for students to apply formally for acceptance by a specific Engineering department.

The minimum requirements for acceptance by the departments administering the Engineering programs in Chemical, Civil, Computer, Electrical, Industrial and Mechanical Engineering are:

1. Completion of English, Calculus, Differential Equations, Physics and Chemistry requirements with a grade of "C" or better in each required course.
2. Satisfactory completion of EGN 1002 - Engineering Orientation.
3. Completion of the following courses with either: (1) a grade of "C" or better in each course on first attempt, or (2) a cumulative grade point average of 2.2 in these courses based on all attempts. No grades below a "C" accepted:

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirements</th>
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<tbody>
<tr>
<td>EGN 2210 - Fortran for Engineers</td>
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<tr>
<td>EGN 3333 - Statics</td>
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<tr>
<td>EGN 3343 - Thermodynamics I</td>
<td></td>
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<tr>
<td>EGN 3443 - Engineering Statistics</td>
<td></td>
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<tr>
<td>EGN 3373 - Introduction to Electrical Systems</td>
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</tr>
</tbody>
</table>

The minimum requirements for admission to the Computer Engineering program offered by the Computer Science and Engineering Department are completion of sections 1 and 2 above and:

1. Completion of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGN 3373 - Introduction to Electrical Systems</td>
<td></td>
</tr>
<tr>
<td>EGN 3343 - Engineering Statistics</td>
<td></td>
</tr>
<tr>
<td>CCP 3002 &amp; CCP 3000L - Intro to Computer Science and Lab</td>
<td></td>
</tr>
<tr>
<td>EGN 3313 - Statics</td>
<td></td>
</tr>
<tr>
<td>EGN 3343 - Thermodynamics I</td>
<td></td>
</tr>
</tbody>
</table>

with a minimum of "C" on the first attempt.

2. The minimum requirements for admission to the Computer Science program offered by the Computer Science and Engineering Department are completion of sections 1 and 2 above and completion of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>COT 3001 - Discrete Structures</td>
<td></td>
</tr>
<tr>
<td>EGN 3373 - Introduction to Electrical Systems</td>
<td></td>
</tr>
<tr>
<td>STA 4442 - Introduction to Probability</td>
<td></td>
</tr>
<tr>
<td>CCP 3002 &amp; CCP 3000L - Intro to Computer Science and Lab</td>
<td></td>
</tr>
</tbody>
</table>

Students who fail to obtain a "C" grade on the first attempt must obtain a cumulative 2.2 G.P.A. based on all attempts.

Prior to being admitted to a department, a student may be permitted to take no more than two departmental engineering courses.

Direct Departmental Admission

The purpose of Direct Departmental Admission (DDA) is to permit students who have displayed academic potential for completing the rigorous requirements for admission to a particular department. The student must apply through the Advising Office of the College of Engineering. The requirements for Direct Departmental Admission (DDA) are:

1. Admission to the College of Engineering
2. High School Students: SAT scores of 500 Verbal and 600 Mathematics, a cumulative total of 1100; ACT scores of 28 Mathematics, a combined average score of 26.8
3. Transfer Students: Successful completion of the following 17 hours of courses with a minimum grade point average of 3.30. (Grades in these courses must be either "A" or "B" - a student with a "C" or less grade in any one of the below listed courses is not eligible for DDA.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 3281 - Engineering Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 3282 - Engineering Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>MAC 3283 - Engineering Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3048 - General Physics I &amp; Lab</td>
<td>3+1</td>
</tr>
</tbody>
</table>
**Biomedical Engineering** is a highly interdisciplinary program, drawing from all engineering disciplines, biology, physical sciences, biomedical and clinical sciences. An undergraduate Certification in Biomedical Engineering is available to students in all areas of engineering. This Certificate is designed with two main objectives: 1) to prepare interested students for admission into medical school, and 2) to prepare students for graduate work in either Biomedical Engineering, other engineering disciplines, or the Biomedical Sciences. Opportunities for students to gain research experience exist within the College of Engineering and the Health Sciences Center.

Please contact the Chemical Engineering Department for more information on these programs.

**Civil Engineering and Mechanics**

This department offers coursework 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, finite element techniques, numerical methods; geotechnical engineering; transportation engineering; water resources engineering, environmental engineering, and coastal engineering. The department administers the Bachelor of Science in Civil Engineering (B.S.C.E.) and has a policy of mandatory academic advising of students for each school term. It also administers the Master of Science in Civil Engineering (M.S.C.E.) program, and a design oriented professional engineering Master of Civil Engineering (M.C.E.) program. These Master's programs can be completed with all evening coursework. As applicable, the department administers the 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 coursework and study in all areas fundamental to Computer Science, Computer Engineering, and Information Systems. Topics dealt with are computer architecture and hardware design, software engineering, computer system organization, operating systems, algorithms and data structures, computer graphics, database systems, theory of computation and artificial intelligence.

The Department administers the baccalaureate degree programs in Computer Science, Computer Engineering and Information Systems; the Master of Science degree programs in Computer Science and in Computer Engineering; and Ph.D. program in Computer Science and Engineering. Our research areas of faculty concentration are 1) computer architecture and VLSI design/testing, 2) artificial intelligence and expert systems, 3) software engineering, and 4) graphics/image processing/computer vision.

Computing facilities available to students in the Department include several microprocessors and design laboratories for hardware-oriented studies, several personal computer laboratories for general use in programming assignments, and a substantial number of graphics-oriented personal computers. The Department also runs a research-oriented network consisting of Intel Hypercube, TIE Explorer, a number of AT&T 382 machines, a number of SUN workstations, and special purpose image and graphics processors. In addition, the Department has access to a large IBM mainframe facility run by the University Computing Center.

**Electrical Engineering**

This department offers study in all areas fundamental to Electrical Engineering and the electrical sciences: circuit analysis and design, electronics, communications, electromagnetics, controls, solid state systems analysis, digital circuit design, etc. Basic concepts are augmented with well-equipped laboratories in networks, electronics, automatic controls, 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 undergraduate 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 administers the M.S.E.E., M.E., M.S.E.S. and the Ph.D. in Electrical Engineering programs.

Industrial and Management Systems Engineering

This department offers study pertinent to the design, evaluation and operation of a variety of industrial systems, ranging from the analysis of public systems to the operation of manufacturing plants. Topics include production planning and control, production and plant design, applied-statistics, operations research, human factors and productivity, manufacturing, and automation. The department has excellent laboratory facilities which support class projects and research in microcomputer applications, computer-aided manufacturing, automation, and applications of robotics. 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, as well as the manufacturing option in the M.S.E. program.

Mechanical Engineering

The department offers courses leading to the degrees of Bachelor of Science in Mechanical Engineering (B.S.M.E.), Bachelor of Science in Engineering (B.S.E.), Master of Science in Mechanical Engineering (M.S.M.E.), Master of Science in Engineering (M.S.E.), and Doctor of Philosophy (Ph.D.). Coursework includes basic science and mathematics, thermal and fluid sciences, material science, solid mechanics, dynamics, machine design, vibrations, instrumentation and automatic control.

Graduates have found employment in research, design, production, marketing, service, installation (contracting), maintenance and operation in such industries as mining, petroleum, paper, food, power, manufacturing, air-conditioning, defense systems, aerospace, data processing and communications.

Laboratories are available for basic instrumentation, thermal and fluid sciences, solid mechanics, data acquisition and control, CAD/CAE, vibrations, robotics and aerodynamics. A minimum cumulative GPA of 2.2 is required in all departmental courses for the awarding of a B.S.M.E. degree.

Engineering Core

Both the four-year and five-year curricula of the College of Engineer­ ing Bachelor of Science programs are founded on a common core of coursework which is required of all students. This coursework 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:

- **Non-technical Courses**
  - (Social Sciences, Humanities, Communications) 30 Sem. Hrs.
  - Mathematics, Chemistry and Physics (Minimum) 35 Sem. Hrs.
  - Basic Engineering Science (Minimum) 36 Sem. Hrs.
  - Department Specialization 35 Sem. Hrs.
  - 136 Sem. Hrs.

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, 1102) in their first two semesters.

Additional coursework 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 his/her engineering department chairperson (or approved representative) prior to enrollment. In no case will credits be allowed for courses taken on an S/U basis. A minimum of eight credit hours of this coursework must be of 2000 level or higher. 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 three hours of work which will satisfy 6A-10.30 (the "Gordon Rule"). It is required by ABET that non-technical studies have at least two courses (6 hours) taken in the same subject area in either Humanities/Fine Arts or Social Sciences. Students transferring from other colleges without having met ABET depth and breadth requirements must take additional Social Sciences/Humanities courses at USF to meet this requirement.

It is desirable that at least 24 hours of this coursework be taken in the first two years. Students are responsible for checking with their advisors 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 coursework 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 coursework. 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 courses 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 coursework. (Some credit towards this core requirement can be obtained by passing applicable CEEB Advanced Placement Tests or CLEP Subject Examinations.)

In mathematics this coursework 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 coursework students must take the Physics with Calculus sequence and the General Chemistry sequence.

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) coursework drawn from the major disciplines. This coursework is designed to equip the student with a sound technical foundation for later, more advanced specialized coursework and the eventual formation of professional judgment. This coursework 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 coursework 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.

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

These engineering degrees are awarded upon successful completion of a program consisting of the required three areas of core coursework--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:

<table>
<thead>
<tr>
<th>1. General</th>
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<tbody>
<tr>
<td>All departments of the College of Engineering 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 the 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 valuable program for students with special needs. Pre-medical students may elect this option. It accommodates up to 32 hrs. of special pre-med coursework (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 undergraduate academic preparation.</td>
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<tr>
<th>2. Chemical Engineering</th>
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<tr>
<td>Students pursuing the Bachelor of Science in Chemical Engineering take course work in advanced chemistry, thermodynamics, fluids, heat, and mass transfer, separation processes, reacting systems, instrumentation, and control. Students must also satisfactorily complete a design and/or case study as part of their program. Students in the biotechnology/biomedical option are also required to take additional courses in general biology, microbiology, and biochemistry. Special characteristics of the Chemical Engineering curriculum make it imperative that the students retain close contact with their advisor. Students completing this program normally initiate their careers in process/manufacturing industries. Chemical engineers are found in administrative, technical, and research positions in these industries. Main products of these industries are petrochemicals, polymers, fibers, natural and synthetic fuels, electronic materials, fertilizers, pharmaceuti- cals, etc. Modern societal problems and technology have required the Chemical Engineering “know-how” to be applied in the biotechnology/ biomedical and environmental areas. These fields depend on the chemical engineer, among others, for solutions. The schedule which follows indicates how a serious 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.</td>
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<thead>
<tr>
<th>Bachelor’s Curriculum</th>
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<tbody>
<tr>
<td><strong>Chemical Engineering</strong></td>
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<table>
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<tr>
<th>Semester I</th>
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<tbody>
<tr>
<td>ENC 1101 Freshman English I</td>
</tr>
<tr>
<td>MAC 3281 Engineering Calculus I</td>
</tr>
<tr>
<td>CHM 2045 General Chem. I</td>
</tr>
<tr>
<td>EGN 1002 Engineering Orientation</td>
</tr>
<tr>
<td>Social &amp; Behav. Science Elective</td>
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<tr>
<td>Humanities Elective</td>
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<td><strong>Total</strong></td>
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<tr>
<th>Semester II</th>
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<tbody>
<tr>
<td>ENC 1102 Freshman English II</td>
</tr>
<tr>
<td>MAC 3282 Engineering Cal II</td>
</tr>
<tr>
<td>CHM 2046 General Chem. II</td>
</tr>
<tr>
<td>CHM 2045L Gen Chem I Lab</td>
</tr>
<tr>
<td>PHY 3048 General Physics I</td>
</tr>
<tr>
<td>PHY 3048L Gen. Physics Lab I</td>
</tr>
<tr>
<td>Humanities Elective</td>
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<td><strong>Total</strong></td>
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<tr>
<th>Semester III</th>
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<tbody>
<tr>
<td>MAC 3283 Engineering Calculus III</td>
</tr>
<tr>
<td>MAP 4302 Differential Equations</td>
</tr>
<tr>
<td>CHM 2048L Gen. Chem II Lab</td>
</tr>
<tr>
<td>PHY 3049 Gen. Physics II</td>
</tr>
<tr>
<td>PHY 3049L Gen. Physics Lab II</td>
</tr>
<tr>
<td>EGN 3313 Statics</td>
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<tr>
<td>EGN 3373 Electrical Systems I</td>
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<tr>
<td>EGN 2210 Fortran</td>
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<tr>
<td>EGN 3343 Thermodynamics I</td>
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<tr>
<td>EGN 3443 Statistics</td>
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<tr>
<td>Social Science Elective</td>
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<td><strong>Total</strong></td>
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<tr>
<th>Semester IV</th>
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<tbody>
<tr>
<td>EGN 4540 Intro. to Linear Systems</td>
</tr>
<tr>
<td>EGN 3365 Materials</td>
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<tr>
<td>EML 3303 Mec Eng Lab I</td>
</tr>
<tr>
<td>ECH 3301 Instrument Systems I</td>
</tr>
<tr>
<td>ECH 3023 Intro. to Process Eng</td>
</tr>
<tr>
<td>Social Science Elective</td>
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<td><strong>Total</strong></td>
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<tr>
<th>Semester V</th>
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<tbody>
<tr>
<td>ECH 3264 Transport Processes I</td>
</tr>
<tr>
<td>ECH 3264L Transport Processes I Lab</td>
</tr>
<tr>
<td>ECH 4123 Phase &amp; Chemical Equilibria</td>
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<tr>
<td>ECH 4123L Phase &amp; Chemical Equilibria Lab</td>
</tr>
<tr>
<td>CHM 3210 Organic Chemistry I</td>
</tr>
<tr>
<td>CHM 3210L Organic Chemistry I Lab</td>
</tr>
<tr>
<td>CHM 4412 Physical Chemistry III</td>
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<td><strong>Total</strong></td>
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<table>
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<tr>
<th>Semester VI</th>
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<tbody>
<tr>
<td>ECH 4265 Transport Processes II</td>
</tr>
<tr>
<td>ECH 4265L Transport Processes II Lab</td>
</tr>
<tr>
<td>CHM 3211 Organic Chemistry II</td>
</tr>
<tr>
<td>ECH 4605 Procs Eco &amp; Opt</td>
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<tr>
<td>Technical Elective</td>
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<tr>
<td>Liberal Arts Elective</td>
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<td><strong>Total</strong></td>
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</table>
### 3. Civil Engineering

Students pursuing the Bachelor of Science in Civil Engineering program take designated traditional civil engineering and engineering mechanics coursework in solid mechanics, stress analysis, structures, materials, hydraulics, geotechnical, transportation, and engineering analysis. This coursework is supplemented by courses in one of the following areas of concentration, plus electives.

- Environmental/Water Resources - courses in water treatment, waste water treatment, air pollution control and water resources.
- Geotechnical/Transportation - courses in soil mechanics, foundations, transportation, and surveying.
- Materials - courses in engineering materials, polymers, corrosion control and materials processes.
- Structural Engineering - courses in structural analysis and design, composite structures, using matrix and computer techniques.

Students completing this option enter careers as engineers in the civil, structural, geotechnical, transportation and water resources, environmental, hydraulics, materials, 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 academic studies specifically towards his/her career choice. Civil Engineering students commence their engineering careers in either industry, in 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; design of bridges, single and multistory structures; and supervision of construction projects.

The schedule which follows indicates how a serious, well prepared student who can devote full time to coursework 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 Curricula

#### Civil Engineering Option

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<tbody>
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<td>Intro to Elec. Sys. I</td>
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<td>EGN 3343</td>
<td>Thermodynamics I</td>
</tr>
<tr>
<td>EGN 3443</td>
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<td>CES 4702</td>
<td>Concepts Concrete Design</td>
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### Civil Engineering Concentration Requirements

(A student must complete a minimum of 9 hours, with at least 2 courses from one group.)

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<tbody>
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<tr>
<td>ENV 4101</td>
<td>Air Pollution Control</td>
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<td>CWR 4103</td>
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## Geotechnical/Transportation

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<th>Course Title</th>
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<td>TTE 4005</td>
<td>Transportation Engineering II</td>
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<tr>
<td>SUR 3140C</td>
<td>Engineering Land Surveying</td>
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## Materials

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<td>EMA 4324</td>
<td>Corrosion of Engineering Materials</td>
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<td>EMA 4703</td>
<td>Failure Analysis &amp; Prevention</td>
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## Structural

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<tr>
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<td>Matrix Structural Analysis</td>
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<tr>
<td>CES 4820</td>
<td>Timber &amp; Masonry Design</td>
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## Civil Engineering Design Requirements

(A student must complete a minimum of 4 hours with at least 1 course from the same area of concentration selected for 2 concentration requirements.)

### Environmental/Water Resources

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<tbody>
<tr>
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<td>Hydraulic Design</td>
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<tr>
<td>ENV 4432</td>
<td>Water Systems Design</td>
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<tr>
<td>CGN 4914</td>
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### Geotechnical/Transportation

<table>
<thead>
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<th>Credits</th>
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<td>Geotechnical Design</td>
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<tr>
<td>TTE 4821</td>
<td>Transportation System Design</td>
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<td>CGN 4914</td>
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### Materials

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<tr>
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<tbody>
<tr>
<td>CGN 4851</td>
<td>Cement and Concrete Design</td>
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<td>EMA 4704</td>
<td>Selection and Application of Materials</td>
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<td>CGN 4914</td>
<td>Senior Project</td>
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### Structural

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<tr>
<td>CES 4618</td>
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<td>CES 4704</td>
<td>Structural Design-Concrete</td>
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## Environmental Engineering Concentration Within Civil Engineering

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<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman English I</td>
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<tr>
<td>MAC 3281</td>
<td>Engr Calculus I</td>
<td>3</td>
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<tr>
<td>CHM 2045</td>
<td>General Chemistry I</td>
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<tr>
<td>EGS 1113</td>
<td>Intro to Des. Graphics</td>
<td>3</td>
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<tr>
<td>EGN 1002</td>
<td>Engr Orientation</td>
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<tr>
<td>Approved Social Science Elect.</td>
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<tr>
<td>MAC 3282</td>
<td>Engr Calculus II</td>
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<td>CHM 2046</td>
<td>General Chemistry II</td>
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<td>CHM 2045L</td>
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<tr>
<td>PHY 3048</td>
<td>General Physics I</td>
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<td>PHY 3048L</td>
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<th>Semester III</th>
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<tr>
<td>MAC 3283</td>
<td>Engr Calculus III</td>
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<td>PHY 3049</td>
<td>General Physics II</td>
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<td>PHY 3049L</td>
<td>General Physics II Lab</td>
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<td>EGN 2200</td>
<td>Engr with Computers</td>
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<tr>
<td>EGN 3313</td>
<td>Statics</td>
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<td>Thermodynamics I</td>
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<td>Intro to Elect. Sys. I</td>
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<td>Env. Unit. Operation</td>
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<td>CEG 4011</td>
<td>Soil Mechanics I</td>
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<td>EMC 3103</td>
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<td>Env. Unit Processes</td>
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<td>ENV 4531</td>
<td>Wastewater Systems Design</td>
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## 4. 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 Information Systems program (leading to a Bachelor of Science in Information Systems).

The Computer Engineering program emphasizes the design and utilization of computers 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 fundamental and formal aspects of computation. The Information Systems program provides a foundation for careers in the corporate information systems environment by blending application-oriented computer science with a substantial exposure to business courses.

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, often following graduate education, are present in the areas of computer architecture and VLSI design, artificial intelligence, software engineering, digital data communications, robotics, fault-tolerant computing and testing, computer graphics, image processing and computer vision, and simulation.

The schedules which follow indicate how a serious, well prepared student who can devote full time to coursework 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**

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>Physics I Lab</td>
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<td>ENC 1102</td>
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**Technical Electives**

|  |
|---|---|
| Social Science/Hum | 3 |

**Semester VII**

|  |
|---|---|
| CDA 4100 | Computer Organization | 3 |
| COP 4400 | Comp. Systems | 3 |
| COT 4210 | Automata Theory | 3 |
| Free Elective | 3 |
| Computer Science Elective | 3 |

**Semester VIII**

|  |
|---|---|
| EEL 4757 | Microprocessors | 3 |
| EEL 4743L | Micro. Lab | 1 |
| COP 4600 | Sys. Prog. | 3 |
| COT 4400 | Analysis Alg. | 3 |
| Computer Science Elective | 3 |
| Free Elective | 3 |

**Semester IX**

|  |
|---|---|
| EEL 4860 | Software Engr | 3 |
| COP 4020 | Prog. Lang. | 3 |
| Computer Science Electives | 9 |

**Bachelor of Science in Computer Engineering Curriculum**

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**Technical Electives**

|  |
|---|---|
| Social Science/Hum | 3 |

**Semester VII**

|  |
|---|---|
| CDA 4100 | Computer Organization | 3 |
| COP 4400 | Comp. Systems | 3 |
| COT 4210 | Automata Theory | 3 |
| Free Elective | 3 |
| Computer Science Elective | 3 |

**Semester VIII**

|  |
|---|---|
| EEL 4757 | Microprocessors | 3 |
| EEL 4743L | Micro. Lab | 1 |
| COP 4600 | Sys. Prog. | 3 |
| COT 4400 | Analysis Alg. | 3 |
| Computer Science Elective | 3 |
| Free Elective | 3 |

**Semester IX**

|  |
|---|---|
| EEL 4860 | Software Engr | 3 |
| COP 4020 | Prog. Lang. | 3 |
| Computer Science Electives | 9 |
**Bachelor of Science in Information Systems Curriculum**

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**5. Electrical Engineering**

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 coursework in network analysis, electronics, communications, electromagnetic theory, control systems, microelectronics and microprocessors. This coursework is supplemented by electives in many specialized areas of electrical engineering.

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 research and development (often requires an advanced degree), design, production, operation, sales, or management of these products/services.

The schedule which follows indicates how a serious, well prepared student who can devote full time to coursework 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

### Electrical Engineering

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### Industrial and Management Systems Engineering

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### 6. Industrial Engineering

Students pursuing the Bachelor of Science in Industrial Engineering degree program take designated, specialized coursework in industrial processes, work analysis, production control, facilities design, operations research, human factors, computer simulation, quality control, and robotics 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, business, 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 coursework 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.
7. Mechanical Engineering

Students pursuing the Bachelor of Science in Mechanical Engineering program take coursework in thermodynamics and heat transfer; instrumentation and measurements, energy conversion systems, solid and fluid mechanics, dynamics, machine analysis and design, mechanical design, controls, and fluid machinery. This is supplemented by elective coursework in such areas as power plant analysis, refrigeration and air conditioning, mechanical design, advanced mechanics, heat transfer, robotics, propulsion, vibrations, computer-aided design, manufacturing, composite materials, and aerodynamics.

Students completing this option normally enter careers in a wide range of industries which either produce mechanical products or rely on machines, mechanical devices and systems to produce electricity, petroleum products, foods, textiles, building materials, etc. Mechanical Engineering graduates may follow careers in such fields as transportation, power generation, manufacturing, instrumentation, automatic control, machine design, construction, refrigeration, heating and air conditioning, aerospace, defense and all the process industries (foods, textiles, petrochemicals, pharmaceuticals, etc.). There are career opportunities in this wide range of industries because mechanical equipment is required in all aspects of industrial production.

Bachelor's Curriculum

Mechanical Engineering

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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 grade requirements satisfactorily toward the humanities and social sciences, and which are directed toward the humanities and social sciences, and which are completed as part of a degree, the Social Science and Humanities Core Requirements.

2. Mathematics Requirement

Students in the College of Engineering may be divided into four categories: a) General Education or Non-technical requirements; b) Basic Science Requirements (i.e., Math, Chemistry and Physics); c) Engineering Science Requirements; d) Specialization Requirements. All undergraduate students in the College of Engineering are required to maintain the minimum grade-point average (GPA) for each category specified by the department responsible for the program pursued. In no case will the minimum GPA for a category be less than 2.0. 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. 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. Some programs may have higher requirements for certain categories. It is the student's responsibility to assure she/he meets all departmental requirements. 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.

Students who do not maintain the required minimums of the program pursued in each category are ineligible for further registration in the College unless individually designed continuation programs are recommended by the student's academic adviser and approved by the department chairperson and the Engineering Associate Dean for Academic Affairs. All students who are academically dismissed from the University will be denied readmission to the College of Engineering unless they meet admission requirements in effect at the time readmission is sought and are recommended for readmission by the department and the Associate Dean for Academic Affairs.

Students who register for a course three times without receiving a grade of "C" or better (i.e., receive grades of W, D, or F) will be denied further enrollment in the College of Engineering unless written permission is obtained from the department chairperson and the College Associate Dean for Academic Affairs.

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

The College of Engineering requires that a student complete the Basic Science, Engineering Science and Specialization Requirements for the baccalaureate degree within seven years prior to the date of graduation. Any exceptions require approval of the department and Dean's Office.

Each engineering student is required to complete the Application for Graduation - Check List and submit it to the College of Engineering Advising Office by the drop date of the term prior to the semester in which graduation is sought. Completion of this form is a requirement for graduation.

Effective fall of 1987 all incoming students pursuing Bachelor of Science degrees programs in Chemical, Civil, Electrical, Industrial or Mechanical Engineering will be required to take the Engineering Intern Exam of the State Board of Professional Regulation at least one term prior to the term of anticipated graduation. (See the College Advising Office for applications and information.)

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 coursework 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 Advising Office.

4. Continuation and Graduation Requirements

The curricula for the programs offered by various departments of the College of Engineering may be divided into four categories: a) General Education or Non-technical requirements; b) Basic Education Requirements (i.e., Math, Chemistry and Physics); c) Engineering Science requirements; d) Specialization Requirements. All undergraduate students in the College of Engineering are required to maintain the minimum grade-point average (GPA) for each category specified by the department responsible for the program pursued. In no case will the minimum GPA for a category be less than 2.0. Note that key courses, including but not limited to Freshman English, Calculus, Physics, Engineering, and Science courses in the student's areas of specialization, must be passed with a grade of "C" or better. 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. Some programs may have higher requirements for certain categories. It is the student's responsibility to assure she/he meets all departmental requirements. 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.

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

The College of Engineering requires that a student complete the Basic Science, Engineering Science and Specialization Requirements for the baccalaureate degree within seven years prior to the date of graduation. Any exceptions require approval of the department and Dean's Office.

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5. Transfer Credit

Transfer credit will be allowed by the USF College of Engineering when appropriate if the transferred course has been passed with a grade of "C" or better and when the first USF course following in sequence is also passed with a "C" grade or better. In some cases credit for a course may be granted, but the hours accepted may be less than the hours earned at another school.

While credit for work at other institutions may be granted subject to the conditions of the previous paragraph, a minimum of thirty semester hours of engineering coursework specified by the degree granting department is required for a baccalaureate degree.

FIVE-YEAR PROGRAM - LEADING TO BACHELOR'S AND MASTERS DEGREES

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 or Engineering Science and Master of Science in Engineering or 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 of 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 with a 3.0 GPA.
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 chosen Engineering program is expected.
The four year program in Computer Technology is being merged with the Information Systems program in the Computer Science and Engineering Department. A three year transition plan is in effect starting in August, 1990. New students seeking admission to the four year program are encouraged to apply for admission to the Information Systems program. (See Page 17) The Engineering Technology two year program for the Associate of Science degree transfer from the community college will be phased out by August, 1993.

The programs described below are applicable to students who are currently enrolled.

**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 engineers, and management. It is for this reason that the program consists of a balance of coursework in technical management, and Liberal Arts and Social Science areas.

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

<table>
<thead>
<tr>
<th>Area of Study</th>
<th>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>Total</td>
<td>120</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.

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 previously. 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.

**Technology Admission Requirements**

**Bachelor of Engineering Technology - Computer Technology Program:**

A. Freshmen:

1. **TEST SCORES:**
   - SAT - quantitative of 450 minimum; composite of 900.
   - ACT - mathematics of 18 minimum.

2. **HIGH SCHOOL MATHEMATICS:** Grade point average of 2.5 or better with no grade below "C". Sufficient coursework to enter required Calculus sequence.

B. Transfer Applicants:

1. **MATHEMATICS PREPARATION:**
   a. Completed College Algebra with grade of "B" or better, OR
   b. Completed College Algebra and first applicable Calculus sequence with grade point average of 2.5; no grade below "C."

2. **OVERALL GRADE POINT AVERAGE:** 2.5/4.0 minimum.

**Bachelor of Engineering Technology (A.S. Degree* plus 60 Semester Hrs.)**

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

**Areas of Concentration:**

A) Computers
B) Management

**Junior Year:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 3060</td>
<td>Introduction to Computers I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 2023</td>
<td>Economic Principles (Microeconomics)</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3613</td>
<td>Engineering Economy I</td>
<td>3</td>
</tr>
<tr>
<td>ETI 4600</td>
<td>Industrial Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2001</td>
<td>Elementary Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>Area of Concentration</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>53</td>
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**Senior Year:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STA 3023</td>
<td>Introductory Statistics I</td>
<td>4</td>
</tr>
<tr>
<td>COP 3200</td>
<td>FORTRAN</td>
<td>3</td>
</tr>
<tr>
<td>ETI 4614</td>
<td>Principles of Indus. Ops. I</td>
<td>3</td>
</tr>
<tr>
<td>Area of Concentration</td>
<td></td>
<td>6</td>
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<td>Total</td>
<td></td>
<td>16</td>
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**Approved Communications Course**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETI 4681</td>
<td>Principles of Indus. Ops. II (Project)</td>
<td>3</td>
</tr>
<tr>
<td>Area of Concentration</td>
<td></td>
<td>8</td>
</tr>
<tr>
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<td></td>
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**Areas of Concentration (17 semester hours)**

<table>
<thead>
<tr>
<th>Area of Study</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer</td>
<td></td>
</tr>
<tr>
<td>COP 3121</td>
<td>3</td>
</tr>
<tr>
<td>COP 3122</td>
<td>3</td>
</tr>
<tr>
<td>CDA 3101</td>
<td>3</td>
</tr>
<tr>
<td>CGS 4465</td>
<td>3</td>
</tr>
<tr>
<td>ETG 4931</td>
<td>3</td>
</tr>
<tr>
<td>General Studies Electives</td>
<td>2</td>
</tr>
<tr>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>MAN 3025</td>
<td>3</td>
</tr>
<tr>
<td>MAR 3023</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
</tr>
</tbody>
</table>
### Bachelor's Curriculum For Computer Technology

**Semester I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman English I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 2233</td>
<td>Elem. Calc. I</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2001</td>
<td>Elementary Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>CGS 3080</td>
<td>Intro to Computers (Basic)</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Social Science</td>
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**Semester II**

<table>
<thead>
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</thead>
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<tr>
<td>ENC 1102</td>
<td>Freshman English II</td>
<td>3</td>
</tr>
<tr>
<td>MAC 2234</td>
<td>Elem. Calc. II</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2011</td>
<td>Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>COP 3200</td>
<td>FORTRAN</td>
<td>3</td>
</tr>
<tr>
<td>Social Science</td>
<td></td>
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**Semester III**

<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECO 2013</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3613C</td>
<td>Engineering Economy</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3053</td>
<td>General Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3053L</td>
<td>General Physics Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CDA 3100</td>
<td>Computers II</td>
<td>3</td>
</tr>
<tr>
<td>Approved Non-technical Elective</td>
<td></td>
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</tr>
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**Semester IV**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 3054</td>
<td>General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3054L</td>
<td>General Physics Lab II</td>
<td>1</td>
</tr>
<tr>
<td>CDA 3101</td>
<td>Computers III</td>
<td>3</td>
</tr>
<tr>
<td>STA 3023</td>
<td>Intro. Statistics</td>
<td>4</td>
</tr>
<tr>
<td>ECO 2023</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Approved Non-technical Elective</td>
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**Semester V**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETI 4600</td>
<td>Industrial Systems</td>
<td>3</td>
</tr>
<tr>
<td>CGS 3462</td>
<td>PASCAL</td>
<td>3</td>
</tr>
<tr>
<td>MAN 3025</td>
<td>Prin. Management</td>
<td>3</td>
</tr>
<tr>
<td>CGS 4260</td>
<td>Mini-Computer Application</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Social Science</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Semester VI**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETI 4614</td>
<td>Princ. Indus. Oper. I</td>
<td>3</td>
</tr>
<tr>
<td>COP 3120</td>
<td>COBOL I</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3403</td>
<td>Princ. Finance</td>
<td>3</td>
</tr>
<tr>
<td>CGS 4465</td>
<td>Data Rep. &amp; Manipulation</td>
<td>3</td>
</tr>
<tr>
<td>Communications Course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Semester VII**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 3121</td>
<td>COBOL II</td>
<td>3</td>
</tr>
<tr>
<td>MAR 3023</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ETG 4931</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>COP 3300</td>
<td>GPSS (or Technical Elective)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Semester VIII**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETI 4861</td>
<td>Princ. Ind. Oper. II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Approved listings of General Study Electives/Humanities Social Sciences and Communication courses available in Engineering Advising Office (ENG 104).**

**Certificate Programs**

**Certificate in Biomedical Engineering**

The Certificate in Biomedical Engineering provides students an opportunity to get an introduction to a rapidly developing field of study and to receive recognition for their endeavors. Students in the program must fulfill the requirements for an undergraduate degree, such as Bachelor of Science in Chemical Engineering, and also meet the additional requirements of the Certificate program.

**Course:**

**Chemistry/Biology** (10 hours min.)
- BSC 2010 Fundamentals of Biology*
- BCM 3033 Biochemistry**

One of the following Organic Chemistry sequences:
- CHM 3210 Organic Chemistry I*
- CHM 3211 Organic Chemistry II*
- CHM 3200 Organic Chemistry***

Other "human sciences" (6 hrs. min.)
- PSY 3044 Experimental Psychology**

One of the following:
- PET 3310 Kinesiology
- PET 3351 Exercise Physiology I
- EXP 4104 Sensory Processes
- PSB 4013 Neuropsychology

**Engineering** (15 hrs. min.**)
- EEL 4935 Biomedical Instrumentation
- ECH 5748 Intro to Biomedical Engineering

One or more of the following (to achieve 9 hrs. min. in area):
- EIN 4314 Human Factors
- EIN 5245 Work Physiology & Biomechanics
- ECH 5747 Selected Topics in Biotechnology
- ECH 5748 Selected topics in Biomedical Engineering

*These courses are typically required for Medical School admission. Note that there may be other required courses, such as a course in Human Genetics and the Organic Chemistry laboratories.

**These courses are not normally required for Medical School admission, but are often "highly recommended."
This is a single semester course in Organic Chemistry. This course does not normally satisfy the admission requirements of most medical schools. It also does not count towards the Chemical Engineering degree (students must take the full year sequence).

It is important to note that these engineering courses are above and beyond the courses necessary to satisfy the 136 hour requirement. That is, these courses will not also be countable as engineering electives towards the B. S. requirements for any of the departmental degree programs.

Certificate of Enhancement
The Certificate of Enhancement in (designated discipline) provides students an opportunity to gain an enhanced experience in their chosen field while pursuing an engineering degree and to permit them to receive recognition for the same requirements.

Requirements:
1. Enrolled in a Bachelor of Science degree program in a specified engineering discipline.
2. A minimum of 15 hours of additional elective courses, not included as a part of the B. S. degree, from an approved list. Courses must be taken on a letter-grade basis and a minimum of 9 hours must be in engineering courses.
3. A G.P.A. of 2.0 or greater for the 15 (plus) hours.
4. The student must receive the engineering degree to receive the Certificate of Enhancement.

Please contact the appropriate department chairperson to be accepted in the program.

Computer Service Courses
These courses 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 coursework, 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, PL/I, COBOL, PASCAL, BASIC, "C" and ADA.

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
Each of the departments has several modern well-equipped laboratories that are used for undergraduate teaching. Some examples of specialized equipment available are a scanning electron microscope, a gas chromatograph mass spectrometer, a 250,000 lb. material testing machine, several microprocessor base control systems, industrial robots, a low turbulence subsonic wind tunnel, computer numerical controlled machinery, metal organic chemical vapor deposition systems, and integrated circuits design workstations.

College Computing Facilities
The College of Engineering Computing Facilities are used to provide support for specialized engineering calculations above and beyond those which are available at the IBM based Central Florida Regional Data Center (CFRDC).

The College of Engineering operates a cluster of file and computer servers for students and faculty within the College. These consist of SUN servers and four Ardent multiprocessors mini-supercomputers. The networks provide access from offices and laboratories, computer rooms and dial-in facilities. All machines are configured for E-mail, and access to Internet. Conventional asynchronous links to the campus central facility will shortly be supplemented with an Ethernet link.

In addition to the network facilities, the College operates open access P.C. labs. Two are available for undergraduate engineering students; a third smaller lab is reserved for graduate students and faculty. Another open access P.C. lab is operated in conjunction with the Technology program.

The network facilities provide access either via Ethernet or the ISDN. Connections to offices, laboratories and classrooms are available on request, subject to budget priorities. The FEEDS studies are also networked to provide demonstrations for remote classes.

The College facilities run most of the standard engineering software. Languages include Fortran, Basic, Pascal, C, Ada, several varieties of LISP and Prolog. Applications software includes mathematical libraries, suites of programs for VLSI design, chemical process design, civil and mechanical engineering design, robotics simulation, and circuit simulation and analysis. There are high resolution color terminals for use in conjunction with these activities, and for mechanical design there are four multiple display workstations with joysticks and digitizing pads. Similar arrangements are used for VLSI design.

Additionally, the Computer Science and Engineering Department within the College runs other facilities consisting of the three VAX machines, an Ethernet with SUN and AT&T 3B2 machines, and extensive microcomputer laboratories.

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 Career Resource Center's Cooperative Education (Co-op) program alternate periods of paid employment in their major field with 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 sophomore 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. The students receive a Cooperative Education Certificate upon successful completion of a minimum of three work assignments.

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 two other State engineering colleges. The Legislature continues to support this extension with appropriations. 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 1987-88 a sponsored research volume of approximately $5 million dollars passed through EIES (USF). All departments, faculty as well as students, contribute to this research at the University of South Florida. This program is administered by the Engineering Associate Dean for Research. 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 STAC
(Southern Technology Applications Center)

STAC is a multi-state technology transfer organization headquartered in Florida with offices in the College of Engineering at the University of South Florida, and five other SUS universities. STAC's primary mission is to identify promising technologies developed by engineers and researchers in university and federal labs, and to facilitate their commercialization through private sector businesses. In this way American companies, especially small firms, are able to capitalize rapidly on the results of scientific research and technological innovation and realize the increased productivity necessary to compete in the global marketplace.

STAC teams with researchers, inventors, entrepreneurs, start-up companies and established firms in solving their business problems and overcoming their technical hurdles. STAC's team brings diverse professional experience to bear on client projects - including Electrical and Mechanical Engineering, Fluid Mechanics, Computer Technology, Marine Chemistry, Oceanography, Medicine and Dentistry, Biomedical Engineering, Laser Optics, Information Science, Transportation, Anthropology, Manufacturing Management, Systems Analysis, Marketing and Strategic Planning, International Trade and Economic Development. Other experts located in universities, government agencies and the 300+ federal labs nationwide are frequently brought in to complement STAC's in-house expertise. Services offered on a cost reimbursable basis include Feasibility Studies, Market Analysis, Team Building, Proposal Writing, Computerized Searching, Inventor Counseling, and Project Management.

The cornerstone of STAC's technology transfer capabilities is its Information Research Center (IRC). IRC researchers have logged over 200,000 hours of connect time in STAC's international array of more than 1,500 on-line databases that reference a half billion published articles, studies, patents, books and reports. They have assembled an extensive in-house library of journals, news bulletins and periodicals published by leading trade associations and special interest groups which provide data, statistics and news items that are often not distributed publicly. These research capabilities combined with rapid retrieval of documents enables STAC to locate efficiently critical technologies, marketing and business data, experts, facilities, and equipment to complete successfully project tasks.

As one of nine NASA Industrial Applications Centers, STAC also promotes the business benefits of the Space Program, from the ordinary procurement needs of the Agency to Small Business Innovation Research Grants (SBIR) for high tech research to microgravity experiments leading eventually to manufacturing in space. Capitalizing on our nation's most valuable renewable resource STAC promotes the pursuit of science and engineering careers through outreach seminars to K-12 students who will eventually live and work in space.

Army & Air Force R.O.T.C.
For Engineering Students

The Engineering curriculum, coupled with involvement in the Army or Air Force R.O.T.C. program, requires a minimum of five (5) years to complete the degree requirements. Army and Air Force R.O.T.C. cadets must take 16 additional hours in either military science or aerospace studies. Additionally, Air Force-sponsored summer training camp is scheduled between the sophomore and junior year for Air Force cadets, and Army cadets attend an Army-sponsored summer training program between the junior and senior years.

Bi-County Center for Engineering

The Bi-County Center for Engineering was established on the USF at Sarasota campus in 1984. It serves the Manatee and Sarasota County area by providing local access to the College of Engineering program. Selected courses from all departments are offered in response to student needs. The professional programs in Electrical and Computer
COLLEGE OF FINE ARTS

The College of Fine Arts exists in the atmosphere of a comprehensive University. It provides opportunities for students to develop their interests and talents to the highest level possible and encourages them to do so whether they wish to commit to a life in the arts or, as a general interest, to develop appreciation and involvement in the arts. For these purposes, the College educates in the practice of creating, performing, presenting and understanding theatre, music, dance and the visual arts. Our mission is three-fold:
1. Teaching the disciplines for creating, performing, presenting and understanding the arts. This is done by providing the full range of educating experiences that prepare students to:
   a. Practice an art as a full time life commitment;
   b. Practice an art as an important element of the individual's life commitment;
   c. Appreciate the arts as important life enrichers.
2. Creating and researching the arts:
   a. To expand horizons and explore new dimensions in the arts;
   b. To contribute to the expansion of general knowledge and information about the arts;
   c. To improve the teacher's own effectiveness with students.
3. Serving the public by providing cultural enrichment and expertise.

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. The college offers degree programs and courses in art, dance, music and theatre. In addition, it also offers courses in music education and art education in cooperation with the College of Education.

Fine Arts Events
The College of Fine Arts, recognizing 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, is critically aware that a truly comprehensive university performing arts program must include performances and related activities by internationally recognized artists and ensembles.

The list of prestigious artists who 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 Alley, Martha Graham, Marcel Marceau, and the Polish Mime Ballet Theatre. (More extensive lists of visiting artists and performing organizations appear in this catalog under the sections of the specific academic units in the college in which research, demonstration, teaching, and other educational activities have directly benefited students.)

BACCALAUREATE-LEVEL DEGREE PROGRAMS
Programs Leading to the Baccalaureate Degree
The College of Fine Arts offers programs leading to the Bachelor of Arts degree in the fields of Art, Dance, and Theatre, a Bachelor of Fine Arts degree in Theatre, a Bachelor of Music degree in Music, and a Bachelor of Science in Music Education.

Admission to the College
A freshman student may elect to enter the College of Fine Arts as a major in one of the four departments as early as his/her initial entry into the University provided he/she has successfully completed an audition or portfolio review in the appropriate department. At that time, the new freshman should file a Declaration of Major or Change of Curriculum code form indicating the choice of degree program within the College of Fine Arts. However, any continuing student in the University in good standing, upon acceptance by the department, can apply to change from another major to a major in the College of Fine Arts.

The student desiring to make this change must initiate a Change of Major form in the college of the present major and transfer his/her current academic records to the College of Fine Arts' advising office.

Transfer students and students from other units within USF with previous college or university fine arts course credits (art, dance, music, theatre) must have such credits evaluated and meet appropriate portfolio or audition requirements when seeking admission to the College of Fine Arts. These students are urged to make early arrangements for any necessary portfolio reviews or auditions, as well as appointments for advising, since these must take place prior to course scheduling and registration. Further, students are required to provide copies of their transcripts showing all previous college or university coursework for advising, portfolio review and/or audition appointments. Additional information may be obtained and appointments may be made by telephoning or writing the College's advising office or the office of the department of particular interest.

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.

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 three undergraduate degrees, the Bachelor of Arts (B.A.), attainable in the Departments of Art, Dance, and Theatre, the Bachelor of Fine Arts (B.F.A.) in Theatre and the Bachelor of Music (B.M.) in Music. The University requirements are presented in detail elsewhere in this catalog, but are briefly summarized here along with the college and departmental requirements:

1. 120-124 credits for the B.A., 124-126 credits for the B.M., and 154 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 in 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 8 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., B.M., 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., B.M., or B.F.A. degree in the College of Fine Arts.

7. Satisfactorily complete the College Level Academic Skills Test CLAST and the writing and computation course requirement of 8A-10.30 (Gordon Rule).

8. Students applying for a B.A. degree must demonstrate competency in a foreign language as described under Foreign Language Competency Policy of this catalog.

9. Department Requirements:
   **Art Requirements:** Completion of a minimum of 46 credit hours in the major, 19 credit hours of Free Electives (of which 16 hours in art may apply), and 9 hours of non-major credits which may be distributed at the discretion of the Art Department.
   **Dance Requirements:** Completion of a minimum of 44 credit hours in the major, 30 credit hours of Free Electives (of which 17 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 84-86 hours in the major.
   **Music Education Requirements:** For Instrumental Specialization, the completion of a minimum of 19 credit hours of Music Education courses and 52 credit hours of Music courses. For Vocal Specialization, the completion of a minimum of 15 credit hours of Music Education courses and 58 credit hours of Music courses.
   **Theatre Requirements:** For the B.A., the completion of a minimum of 54-55 credit hours in the major with 24 credit hours of Free Electives of which a maximum of 10-11 credit hours may be in the major. For the B.F.A., the completion of a minimum of 75 credit hours in the major with 29-30 credit hours of Free Electives of which a maximum of 10-11 credit hours may be in theatre.

10. Residency Requirements: A minimum of 20 credit hours in the major department must be earned in residence. This requirement, however, may be waived by the department based on examination (e.g., portfolio review, audition, etc.). Also, a student must earn 30 of the last 60 hours of credits in residence at the University of South Florida. However, any course work to be taken and any credits to be earned outside of the University must have prior approval from the appropriate department and the college in order to apply these credits toward graduation.

Waiver of prerequisite course work totaling no more than 12 credit hours in the major or Fine Arts College requirements is possible by demonstration of competence. Unless credit is awarded by approved official tests, i.e., A.P., CLEP, the credit hours must be made up according to departmental or college recommendations. The review for waiver is by faculty committee. Specific questions concerning program requirements for the B.A., B.M. 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 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 arrangement 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:**
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 legal 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.

**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 an 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 coursework 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 students enrolled in major subject area courses are those curriculum allowable courses 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 refer to Academic Policies section for more information concerning the University's S/U Grading policy.

**Dean's List Honors**
See Academic Policies and Procedures, Programs and Services.

**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 listed under the departmental academic program descriptions. For University Minor Policy, consult the section in Catalog.

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 art may pursue a minor in any departmental academic program. A student may also choose a certified minors program described under the departmental academic program descriptions. For University Minor Policy, consult that section in Catalog.

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: 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 4 semester hours each) and/or Critical Studies in Art History (4 semester hours each).
5. Art Senior Seminar, 2 credit hours.
6. Must demonstrate competency in French or German as described under Foreign Language Competency Policy of this catalog.
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)
1. Studio Concentration:
   - ARH 2202C (4) ARH 2203C (4) ART 3001 (4)
   - Plus: Two 4 semester hour classes from 3000 studio level (8)
2. Art History Concentration:
   - ARH 2202C (4) ARH 2203C (4) ARH 3000 (4)
   - Plus: Two 4 semester hour classes from any of the following:
     - ARH 4100 (4) ARH 4301 (4) ARH 4450
     - ARH 4170 (4) ARH 4350 (4) (Required) (4)
     - ARH 4200 (4) ARH 4430 (4) ARH 4530 (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 Barlett, Larry Bell, Lucas Samaras, Robert Irwin, James Rosenquist, Robert Rauschenberg, Philip Pearlstein, Edward Fry, Alice Aycock, Alfred Leslie, Linda Bengil, Ron Gorchov, Patterson Sims, Jack Burnham, Barbara Kuger, Jim Dine, Donald Kuspit and Robert Storr.

ART MUSEUM
The USF Art Museum presents a schedule of changing contemporary exhibitions in the Museum (FAM), in the Teaching Gallery in the Fine Arts building (FAH), and in the lobbies of Theaters I and II. The Art Museum has two triangular exhibition galleries and an open access collection storage area.

The art collection of the University of South Florida is composed of original graphics, drawings, photographs, and African and Pre-Columbian artifacts. Many of the prints and sculpture multiples in the collection were produced at USF’s internationally recognized Graphicstudio established in 1968. Selections from this collection are loaned through the Art Bank program to museums and institutions throughout the United States.

The exhibition program focuses on contemporary American and European art and also showcases the work of faculty, students and alumni. The exhibitions and art collection are of integral part of the studio and art history curriculum of the Art Department and the students, staff and faculty of the university and Tampa Bay communities. Brochures and catalogues of major exhibitions are published by the Art Museum and includes scholarly critical essays leading curators and scholars. Lectures, seminars, workshops and symposia on contemporary issues are presented regularly.

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

Concerts are presented each semester as well as workshop performances. Noted professional dancers and companies perform on campus and in the community providing students with the opportunity to study with visiting artists.

Requirements for the B.A. Degree
Performance Concentration
MODERN CONCENTRATION
(44 semester hours minimum)
- DAA 2204 Ballet II
- DAA 3700 Choreography I
- DAA 3105 Modern Dance III
Courses for

Courses for

BALLET CONCENTRATION

(44 semester hours minimum)

DAA 3202 Ballet III 3
DAA 3701 Choreography II 2
DAN 2811 Music for Dance II 2
DAN 3480 Performance 1
(D Repeat for 2 cr. hrs.)
DAN 3590 Practicum in Dance Prod. I 1
(D Repeat for 2 cr. hrs.)
DAA 4108 Modern Dance IV 4
(D Repeat for 8 cr. hrs.)
DAA 4702 Choreography III 2
DAA 4703 Choreography IV 2
DAN 4111 Survey History of Dance 3
DAN 4112 19 & 20th Century Dance History 3
DAN 4170 Dance Senior Seminar 2
DAN 4906 Directed Study (Jr. Project) 1
DAN 4790 Senior Project 1

Dance Minor Program

A minimum of 20 hours is required for a dance minor. Five hours must be in DAN courses. Ten of the 20 hours must be upper level (3000 and 4000) courses. Studio Dance courses can be repeated only once toward minor degree.

Courses for lower level

Select from:

- Theatre Dance Styles DAA 2000 (2)
- Modern I DAA 2101 (2)
- Modern Dance II DAA 2160 (3)
- Ballet I DAA 2200 (2)
- Ballet II DAA 2201 (3)
- Fundamentals of Jazz Dance DAA 2500 (2)
- Music for Dance I DAN 2610 (2)
- Music for Dance II DAN 2611 (2)
- Dance Improvisations DAA 2704 (2)

Courses for Upper Level (minimum of 10 hours required)

Select from:

- Movement Theory & Body Alignment DAA 3080 (2)
- Modern Dance III DAA 3161 (3-4)
- Ballet III DAA 3202 (3-4)
- Ballet Variations DAA 3220 (1)
- 1. Pointe Class
- 2. Men’s Class
- 3. Character Dance
- Performance DAA 3480 (1)
- Jazz Dance DAA 3502 (2)

Jazz Theatre Dance DAA 3503 (3)
Practicum in Dance Production DAN 3590 (1)
Choreography I DAA 3700 (2)
Choreography II DAA 3701 (2)
Survey Hist of Dance - 6A DAN 4111 (3)
19th & 20th Century Dance DAN 4112 (3)
Modern Dance IV DAA 4108 (4)
Ballet IV DAA 4208 (4)
Teaching of Dance DAE 4300 (1)
Choreography III DAA 4702 (2)
Choreography IV DAA 4703 (3)
Selected Topics in Dance DAN 4930 (1)

1. Massage for Dance
2. Movement Lab

Department Policy For Academic Progress

A maximum of 17 credit hours of Dance electives may apply toward the dance degree. TPA 2232 or 2223 Theatre Crafts: Lighting, or Costume (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 a minimum of 2 credit hours (1 per semester) 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 3480 Performance performing in at least two faculty directed concerts in their junior or senior year.

Junior dance majors are required to complete a junior research project through directed studies (DAN 4906) and senior dance majors are required to choreograph a group work and perform a solo as a senior project.

Entrance to all major technique courses is by faculty audition. Until the student is accepted into Modern Dance III or Ballet III he/she will be considered as a probationary dance major. DAA 2104 or DAA 2204 may be repeated only once for credit toward degree requirements.

Prospective majors are urged to 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 each 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 after being placed on probation 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 course(s) 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 adviser 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. The criteria are:

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 both Fine Arts College requirements and the University's General Distribution and graduation requirements.

**Visiting Artists and Artists-In-Residence**

By supplementing its excellent ongoing 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.M. Degree (Performance, Piano Pedagogy Composition and Jazz Studies):

The music curriculum is designed for students gifted in the performance and/or composition of music. Candidates for a major in music are required to pass an entrance audition in their respective performance area. Composition candidates are required to submit appropriate scores and/or tapes of their compositions for faculty appraisal. All students admitted to the degree program must take a music theory diagnostic examination prior to scheduling music theory classes. Freshmen must pass this examination or enroll in a music fundamentals course which does not fulfill a requirement in the music major curriculum. Transfer students are required to take a similar placement test and enter at the appropriate level. Students may obtain dates and times for these examinations from the music department office.

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

**General Requirements:**

All students seeking a Bachelor of Music degree are required to (1) complete successfully the piano proficiency and music theory-history-literature requirements; (2) present a partial recital during the junior year (except composition majors); (3) present a full recital during the senior year (except music education majors); (4) present a record of satisfactory recital attendance through registration in MUS 3001 (see the specific requirements for MUS 3001 as set by the music faculty). Students must be enrolled in applied music studio during the semester of the recital. Exceptions to all departmental procedures must be authorized through the Director of the School of Music.

Promotion to the next higher level in applied music is made only upon the recommendation of a performance jury conducted by that concentration's faculty. Where appropriate for the degree, the student is required to complete a minimum of two semesters, but no more than three semesters at the 2000 or 3000 level of applied music. Failure to complete these levels within the three semester maximum brings automatic dismissal from the program. Students may repeat the 4000 level as necessary to fulfill the total credit hour requirement (3000 level for composition or music education). Credit for only 2 semesters of applied music at the 1000, 2000, or 3000 levels will be applied toward the degree.

**Core Requirements for all Performance Pedagogy and Composition Concentrations (48-52 semester hours minimum):**

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<tbody>
<tr>
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<td>MUT 1242 (1)</td>
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Vocal Performance
- MVV 2000 (2)
- Music Literature (3)
- MUL 2111 (3)
- Music History (8)
  - MUH 3300 (2)  MUH 3301 (3)  MUH 3302 (3)
- Senior Seminar (1)
- MUS 4935 (1)
- Major Ensemble Performance and Pedagogy Majors (8), Composition (4)

All undergraduate students enrolled in applied music for 4 or 2 credit hours are required to be enrolled concurrently in a major ensemble appropriate to their performing medium.

**Music Electives**

- Performance Concentration: 10 hours
- Piano Pedagogy Concentration: 4 hours
- Composition Concentration: 10 hours

**Core Requirements for Jazz Studies Performance and Jazz Studies Composition Concentrations (54-58 semester hours minimum):**

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<tr>
<td>MUT 1111 (3)</td>
<td>MUT 2116 (3)</td>
</tr>
<tr>
<td>MUT 1112 (3)</td>
<td>MUT 2117 (3)</td>
</tr>
<tr>
<td>MUT 1241 (1)</td>
<td>MUT 2246 (1)</td>
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<tr>
<td>MUT 1242 (1)</td>
<td>MUT 2247 (1)</td>
</tr>
<tr>
<td>Music History (11)</td>
<td></td>
</tr>
<tr>
<td>MUH 3300 (2)</td>
<td>MUH 3301 (3)</td>
</tr>
<tr>
<td>MUH 4801 (3)</td>
<td></td>
</tr>
<tr>
<td>Senior Seminar (1)</td>
<td></td>
</tr>
<tr>
<td>MUS 4935 (1)</td>
<td></td>
</tr>
</tbody>
</table>

**Elective Hours in Music (9)**

- Major Ensemble: Performance (8), Composition (4)

All students enrolled in applied music for 4 or 2 hours are required to enroll concurrently in a major ensemble appropriate to their performing medium.

**Additional Requirements for Specific Concentrations:**

**Performance Concentration**

A total of 32 credit hours of applied music major is required with a minimum of 8 hours to be completed at the 4000 level and concurrent registration in MUS 3001 (Recital Attendance).

**Piano Pedagogy Concentration**

(86 semester hours minimum):

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

- Piano Pedagogy (8)
  - MVK 4640 (4)
  - MVK 4641 (4)

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.

**Jazz Studies-Performance Concentration**

The following courses are required in addition to the core requirements:

- MUT 3683 (2)  MUT 3684 (2)
- Applied music (major) through the 3000 level (min. of 24 hours).
- In addition to the major instrument Jazz Bass and Jazz Guitar majors are required to enroll for 4 credits in the corresponding double bass or classical guitar applied music lessons in addition to the major applied studies.

**Jazz piano proficiency**
Jazz Studies-Composition Concentration

The following courses are required in addition to the core requirements:

- MUC 4203 (6)
- MUC 2202 (3)
- MUC 3203 (3)
- MUC 2201 (3)
- MUC 3202 (3)

Applied music (principal) with a minimum of 4 hours at the 2000 level (min. of 8 hrs.)

In addition to the principal applied music study Jazz Bass and Jazz Guitar majors are required to enroll for 2 credits in the corresponding double bass or classical guitar applied music lessons in addition to the principal applied studies.

Jazz piano proficiency
Elective composition (6)

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 composition 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 designated by the composition faculty.

Major Ensemble (4)
All undergraduate students enrolled in applied music for 2 credit hours are required to be enrolled concurrently in a major ensemble appropriate to their performing medium.

Applied Music (Principal) (8)
A minimum of 8 credit hours of applied music is required with a minimum of 4 credit hours at the 2000 level and concurrent registration in MUS 3001 (recital attendance).

Composition Courses (50)
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 2201 (3,3)
- MUC 3401 (3)
- MUC 3411 (2)
- MUC 3202 (3,3)
- MUC 3402 (3)
- MUC 4312 (2)
- MUC 4203 (3)

and a minimum of 5 hours selected from:

- MUC 2301 (2)
- MUC 3601 (3)
- MUC 4406 (3)
- MUC 3441 (3)
- MUC 3402 (3)
- MUC 4501 (2)
- MUC 3442 (3)
- MUC 4405 (3)
- MUC 4532-453 (3)

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

MUSIC EDUCATION

Requirements for the B.S. Degree (MUE)

The music education curriculum is designed to serve students who wish to develop a high level of musical expertise and have a commitment to help develop similar musical potential in other people.

All students seeking a degree in music education are required to pass an audition in their respective performance area and to take a music theory placement test prior to registering for any music theory class. Students who do not pass the diagnostic test will be placed in a music fundamentals course which does not fulfill a requirement in the music major curriculum. All transfer students are required to take a theory placement test and enter at the appropriate level of study. Students may obtain the dates for these examinations from the music office.

Special requirements for all music education majors: successful completion of the piano proficiency requirements 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 last semester of enrollment in applied music.

Students are to present a record of satisfactory recital attendance through registration in MUS 3001 (see the specific requirements for MUS 3001 as set by the music faculty).

For other degree requirements see College of Education requirements and the University's General Distribution and graduation requirements.

Note exceptions applicable to this program.

1. Instrumental Specialization (72 cr. hrs.)

Music Education courses (20 cr. hrs.)
- MUE 2090 (2) or MUE 3450 (1)* MUE 4311 (3)
- MUE 3421 (1) or MUE 3451 (1) MUE 4321 (2)
- MUE 3422 (1) or MUE 3460 (1)** MUE 4332 (3)
- MUE 3423 (1) or MUE 3461 (1) MUE 4480 (2)

One hour courses must be repeated to achieve 20 cr. hrs.

- Not required of woodwind majors
- Not required of brass majors

Music courses (min. 52 cr. hrs.)
- MUT 1111 (3) MUT 2117 (3) MUC 3300 (2)
- MUT 1112 (3) MUT 2246 (1) MUC 3301 (3)
- MUT 1241 (1) MUT 2247 (1) MUC 3302 (3)
- MUT 1242 (1) MUT 2111 (3) MUC 3101 (2)
- MUT 2116 (3)

Applied Music (Principal) 12 cr. hrs. with a minimum of 4 hours at the 3000 level and concurrent registration in MUS 3001.

Music electives (2)

Applied Music Secondary (Techniques - 3 cr. hrs.)
(One each: string, percussion, voice)

Major performing ensembles
(Minimum of one per semester of applied music - 6 cr. hrs.)

Graduating recital
Piano proficiency requirement
Other Fine Arts Requirement
Art, Dance, Theatre (min. 3 cr. hrs. to be selected from one or more of the other departments of the College of Fine Arts)

2. Vocal Specialization (72 cr. hrs.)

Music Education courses (16 cr. hrs.)
- MUE 2090 (2) MUE 3423 (1) MUE 4352 (2)
- MUE 3421 (1) or MUE 3450 (1) or MUE 3451 (1)*
- MUE 3422 (1) or MUE 3460 (1) or MUE 3461 (1)*
- MUE 4331 (3) or MUE 4311 (3)

One hour courses must be repeated to achieve 16 cr. hrs.

*As determined by audition.

Music courses (min. 56 cr. hrs.)
- MUT 1111 (3) MUT 2116 (3) MUL 2111 (3)
- MUT 1112 (3) MUT 2117 (3) MUL 3300 (2)
- MUT 1241 (1) MUT 2246 (1) MUL 3301 (3)
- MUT 1242 (1) MUT 2247 (1) MUL 3302 (3)
- MUG 3101 (2)

Applied Music (Principal) 12 cr. hrs. through with a minimum of 4 hours at the 3000 level and concurrent registration in MUS 3001.

Applied Music Secondary (Techniques 2 cr. hrs.)
(one each: string, percussion)

Major Ensembles
(Minimum of one per semester of applied music - 6 cr. hrs.)

Music Electives (7)

Piano proficiency requirement
Graduating recital
Other Fine Arts Requirement
Art, Dance, Theatre (min. 3 cr. hrs. to be selected from one or more of the other departments of the College of Fine Arts)

3. General Music Specialization (72 cr. hrs.)

Music Education courses (16 cr. hrs.)
- MUE 3460(1) or MUE 3461(1)*
- MUE 3450(1) or MUE 3451(1)*
**COLLEGE OF FINE ARTS**

MUE 2090(2)  MUE 4352(2)
MUE 3421(1)  MUE 4311(3)
MUE 3422(1)  MUE 4330(3)
MUE 3423(1)

One hour courses must be repeated to achieve 16 cr. hrs.

*As determined by audition.

Music Courses (min. 56 cr. hrs.)

- MUT 1111(3)  MUT 2116(3)  MUE 2111(3)
- MUT 1112(3)  MUT 2117(3)  MUE 3000(2)
- MUT 1241(1)  MUT 2246(1)  MUE 3001(3)
- MUT 1242(1)  MUT 2247(1)  MUE 3002(3)
- MUG 3101(2)

Applied Music Principal 12 cr. hrs. with a minimum of 4 hours at the 3000 level and concurrent registration in MUS 3001.

Applied Music Secondary Techniques (2 cr. hrs.)

(1 each: string, percussion)

Major Ensembles

(minimum of one per semester of applied music - 6 cr. hrs.)

Major electives (7)

- Piano proficiency requirement
- Graduating recital

Other Fine Arts requirement

Art, Dance, Theatre (min. 3 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**

(19-23 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 hours.

1. **Core Curriculum:**

   **Music Theory:**
   - 11 hours
   - Introduction to Music Literature (3)
   - or Music History (3)

2. **Optional Concentrations:**

   a. **History-Theory-Literature**
   - 9-10 hours
   - Music History and or Theory and/or Literature (7-8)
   - Music Ensemble (2)

   b. **Applied Music (Princial)**
   - 8-12 hours
   - Performance Studio courses which may include up to 2 semester hours of class-studio (6-8)
   - MUS 3001 Recital Attendance concurrent with applied music (princial) registration.

   Faculty jury recommendations for sophomore-level studio study (minimum)

   c. **Composition**
   - 9 hours
   - Introduction to Electronic Music (2)
   - Composition Studio courses which may include one course of orchestration (6)
   - Music Ensemble (1)

3. **Admission to all studio courses is by audition. Class or 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.**

**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 Metropolitan Arts Trio, the Ars Nova (faculty) Wind Quintet and the Faculty Jazz Quartet. USF music graduates are found teaching successfully in public schools and universities around the country and performing in a variety of concert settings.

**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. College 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. Awards are made following open auditions held in January, 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 Flute Scholarship, Mary Corey Bogdonas Scholarship, Steve Penevich Scholarship, Marjorie Roe Cello Scholarship, the Zbar Piano Award, and the V. A. Bridges Music Education Scholarship. Additionally, loans, grants and work programs are available to qualified University of South Florida students. Financial aid is granted on need, academic promise and talent.

**Unique Learning Opportunities:**

The School of Music 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 music education, 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 School 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: Norman Dello Joio, Olly Wilson, Randall Thompson, Guarnieri String Quartet, Virgil Thompson, Beaux Arts Trio, Walter Trampler, Boris Goldovsky, Fred Hemke, Gregg Smith, Lukas Foss, Norman Luboff, Maurice Andre, Phil Woods, Jean Pierre Rampal, David Baker, Adele Adian, John Cage, Byron Janis, Karel Husa, Lewis Bellson, Leslie Bassett, David Samuelis, Samuel Adler, Julius Baker, Gunther Schuller, Ransom Wilson, Robert Merrill, T. J. Anderson, Doc Severinsen, Hale Smith, Bethany Beardslee, George Russell, Robert Shaw, Art Blakey, Toshiko Akiyoshi, Andre Watts, Christopher Hogwood

**THEATRE (TAR)**

**The Department Major:**

Through its curriculum and production program, the Department of Theatre offers seriously interested students the opportunity to prepare themselves for 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 selects one of the following areas of study: Performance, Design, Theatre Arts, or Theatre Education. To allow for greater preparation in design, a Bachelor of Fine Arts degree in Design is offered. The department also offers a minor in Theatre. For advanced upper level students a Theatre Honors Program of specialized courses is offered, often involving guest artist residencies.

Through the production program, which includes a variety of performances for the university community and the general public, the student is encouraged to participate in all aspects of theatre practice. The Department also offers opportunities to the advanced student to work with visiting professional companies.
Visiting Artists and Artists-In-Residence:


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

Of the total 124 credit hours needed for graduation in the Performance, Design, or Theatre Arts areas, the student following a Performance area must take a minimum of 54 credit hours, and the student following the Design area or Theatre Arts area must take a minimum of 55 credit hours within the Department of Theatre. In addition, a maximum of 11 credit hours (Performance) and a maximum of 10 credit hours (Design or Theatre Arts) may apply to the theatre electives area. Of the 137-140 total credit hours needed for graduation in the Theatre Education area, the student must take a minimum of 54 credit hours within the Department of Theatre and a minimum of 37-40 credit hours within the College of Education.

The student may choose one of four areas for the B.A. degree: Performance, Design, Theatre Arts, or Theatre Education. Common to all is the following core:

<table>
<thead>
<tr>
<th>Core Curriculum (35 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year (11 credit hours)</strong></td>
</tr>
<tr>
<td>THE 2020 2 credit hours</td>
</tr>
<tr>
<td>TPA 2223 3 credit hours or TPA 2222 3 credit hours</td>
</tr>
<tr>
<td>TPA 2110 3 credit hours</td>
</tr>
<tr>
<td><strong>Second Year (10 credit hours)</strong></td>
</tr>
<tr>
<td>THE 31104 credit hours</td>
</tr>
<tr>
<td>TPA 3086 3 credit hours</td>
</tr>
<tr>
<td><strong>Third Year (8 credit hours)</strong></td>
</tr>
<tr>
<td>Choice of two:</td>
</tr>
<tr>
<td>THE 43203 credit hours</td>
</tr>
<tr>
<td>THE 43703 credit hours</td>
</tr>
<tr>
<td>THE 44423 credit hours</td>
</tr>
<tr>
<td>plus 2 credits of THE 3925 for PI*</td>
</tr>
<tr>
<td><strong>Fourth Year (6 hours)</strong></td>
</tr>
<tr>
<td>Choice of one:</td>
</tr>
<tr>
<td>THE 41804 credit hours</td>
</tr>
<tr>
<td>plus 2 credits of THE 4927 for PI*</td>
</tr>
</tbody>
</table>

*All Theatre Majors must complete 4 PI's (Production Involvement) as part of their graduation requirements. PI's must be taken under: THE 3925 Production Involvement 1 credit hour and/or THE 4927 Advanced Production Involvement 1 credit hour for a total of four (4) hours. Students may register for PI credit in the second semester of the Sophomore year and are expected to register each consecutive semester until completion of four involvements. It is a graduation requirement.

All students desiring admittance into the Scene Study sequence must audition and those entering the upper level Design sequence must present a portfolio.

Required Courses for Areas of Study:

**Performance Area**

(54 hours minimum with core) - 19 hours as follows:

<table>
<thead>
<tr>
<th>Second Year (4 hours)</th>
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<tbody>
<tr>
<td>TPA 3400 2 credit hours</td>
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<tr>
<td>TPA 3790 2 credit hours</td>
</tr>
<tr>
<td><strong>Third Year (6 hours)</strong></td>
</tr>
<tr>
<td>TPA 4153 3 credit hours</td>
</tr>
<tr>
<td>TPA 4152 3 credit hours</td>
</tr>
<tr>
<td><strong>Fourth Year (7 hours)</strong></td>
</tr>
<tr>
<td>TPA 4140 3 credit hours</td>
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<tr>
<td>TPA 4180 3 credit hours</td>
</tr>
</tbody>
</table>

**Design Area**

(55 hours minimum with core) - 20 hours as follows:

<table>
<thead>
<tr>
<th>First Year (3 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Theatre Crafts sequence with TPA 2223 or TPA 2232</td>
</tr>
<tr>
<td><strong>Second Year (3 hours)</strong></td>
</tr>
<tr>
<td>TPA 4211 3 credit hours</td>
</tr>
<tr>
<td>ART 3301 4 credit hours</td>
</tr>
<tr>
<td><strong>Third Year (6 credit hours)</strong></td>
</tr>
<tr>
<td>Choice of 2 depending on choice of design area:</td>
</tr>
<tr>
<td>TPA 3221 3 credit hours or THE 4264 3 credit hours</td>
</tr>
<tr>
<td>TPA 4266 3 credit hours</td>
</tr>
<tr>
<td><strong>Fourth Year (8 credit hours)</strong></td>
</tr>
<tr>
<td>Choice of 2 depending on design area:</td>
</tr>
<tr>
<td>TPA 4020 4 credit hours</td>
</tr>
<tr>
<td>TPA 4040 4 credit hours</td>
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<tr>
<td>TPA 4060 4 credit hours</td>
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</table>

**Theatre Arts Area**

The Theatre Arts area is intended for the student who, in consultation with the Theatre Advisor, wishes to construct his/her own degree program from a broad spectrum of theatre courses. In addition to courses in performance and design, areas of study available are Puppetry, Playwrighting, Stage Management, Directing, Literature and Criticism.

(55 hours minimum with core) - 20 hours as follows:

Two credit hours from any of the Performance sequence of courses (TPP) plus eighteen hours to be selected from the Theatre Department's course offerings.

**Theatre Education Area**

The Theatre Education area prepares students for the Florida Drama Teaching Certification exam for Grades 6-12. In addition to Department of Theatre requirements students must meet the College of Education's upper level entrance requirements and complete 37-40 credit hours in Education.

(54 hours minimum with core in Theatre Department) 19 hours as follows:

<table>
<thead>
<tr>
<th>First Year (3 hours)</th>
</tr>
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<tbody>
<tr>
<td>Complete Theatre Crafts sequence with TPA 2223 or TPA 2232</td>
</tr>
<tr>
<td><strong>Second Year (9 hours)</strong></td>
</tr>
<tr>
<td>TPA 3500 or TPA 3790 2 credit hours</td>
</tr>
<tr>
<td>Complete 8 credit hours from the following</td>
</tr>
<tr>
<td>TPA 2250 1 credit hour</td>
</tr>
<tr>
<td>TPA 32603 credit hours</td>
</tr>
<tr>
<td>TPA 4211 3 credit hours</td>
</tr>
<tr>
<td><strong>Third Year (6 hours)</strong></td>
</tr>
<tr>
<td>TPA 4153 3 credit hours</td>
</tr>
</tbody>
</table>

(37-40 hours minimum in College of Education)

<table>
<thead>
<tr>
<th>Foundations (9 hours)</th>
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<tr>
<td>EDF 3214 3 credit hours</td>
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</tbody>
</table>
Education 3604 3 credit hours  EDG 4620 3 credit hours

General Methods (9 hours)  
EDG 4320 3 credit hours  THE 4723 3 credit hours or THE 4722 3 credit hours

Special Methods (7-10 hours)  
RED 4372 2 credit hours  EOX 4070 2-3 credit hours

Practical Experience (12 hours)  
EDG 4940 10 credit hours  EDG 4938 2 credit hours

Freshman Lab and Production Involvement:  
TPA 2200, TPA 2223 and TPA 2232 have a weekly 4 hour laboratory (LAB) in addition to weekly lectures (3 hours).

Beginning with the second semester of the Sophomore year, the Theatre major is expected to enroll each succeeding semester in either THE 3925 or THE 4927 (1 credit). All theatre majors must satisfy four Pl's before they are approved for graduation. The Pl's are assigned by the faculty and are usually construction or running crews or performance assignments. Each assignment entails a minimum of 55 hours.

Requirement for a Minor In Theatre  
(23 hours minimum):

TPA 2223 3 credit hours  or  TPA 2223 3 credit hours
THE 2020 2 credit hours  TPP 2110 3 credit hours
TPA 2200 3 credit hours  TPA 3925 1 credit hour
THE 4927 1 credit hour

The remaining 10 hours are to be selected by the student with the advice of the theatre advisor. 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 upper level Design sequence must have a portfolio review.

All Theatre Minors must complete 2 Pl's (Production Involvement) as part of their graduation requirements. Pl's must be taken under: THE 3925 - Performance 1 credit and/or THE 4927 - Advanced Performance 1 credit hour for a total of two (2) hours. Students may register for Pl credit in the second semester of the Sophomore year and are expected to register each consecutive semester until completion of two involvements.

Requirements for the B.F.A. Degree in Design:  
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.

Admission to the B.F.A. program is by audition or portfolio presentation and acceptance by the Design 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:

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. (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.)

Design Concentration  
7 hours in Creative Project and Execution:  
THE 4905 or THE 6909 (Research & Design Creative Project) (4 credit hours) and

TPA 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)

Honors Program  
The Honors Program is available to upper level majors who have a 3.0 overall GPA in the major, and who have achieved a comparably high level of artistic and/or scholarly achievement. A 6-8 credit one-year sequence of courses is offered to students accepted into the Honors Program.

THE 4593 2 credit hours
THE 4594 3 credit hours
THE 4595 1-3 credit hours
NEW COLLEGE OF USF

New College of the University of South Florida, located on USF's Sarasota campus, is a distinguished residential college that serves as the honors college of the State University System. It offers a nationally recognized liberal arts education at regular state tuition rates.

The New College student/faculty ratio is approximately 11:1; ninety-four percent of the faculty hold earned doctorates. Students work closely with faculty members in small classes, tutorials, and on individual projects.

Admission criteria are highly selective. New College looks for students who have demonstrated above average ability, academic motivation and self-discipline. About half the students are from Florida.

The New College offers a liberal arts degree in the arts and sciences, leading to a Bachelor of Arts. Students may major in any discipline, and must take a course in the natural sciences, a foreign language, and the humanities.

The Academic Calendar and Residence Requirements

The New College calendar consists of two 15-week semesters and a four-week independent study period in January. Fall semester begins in late August and ends just before Christmas. Spring semester begins the first week in February and ends in late May. Enrollment at New College is full-time.

Students may complete the degree in seven semesters (three and one-half years) as a result of New College's longer academic year and the advanced nature of the program. Three Independent Study Projects are carried out during January and/or the summer recess. Students may register for up to two additional semesters if their academic programs require it; they may also take up to two semesters of academic leave during their tenure at New College without loss of scholarship support. By special petition and with summer study, exceptionally qualified students may complete the degree requirements in three years. All students must complete a senior thesis and pass a baccalaureate examination based upon the senior thesis.

Transfer students may have the number of semesters required for graduation reduced through the awarding of transfer credit for college-level work done elsewhere. The maximum allowable transfer credit is equivalent to three semesters and one independent study project.

Admissions Requirements

New College actively seeks those students who will benefit most from the demanding academic program and flexible curriculum. The college looks for evidence of intellectual potential, strong academic preparation, self-motivation and initiative, tenacity, curiosity and concern for others.

Applicants must submit a State University System application, New College supplementary application, official high school transcript, SAT or ACT scores, a graded research paper from an English or history class, teacher's recommendation, and school report. An interview is required for all applicants within a 100-mile radius of Sarasota and encouraged for all candidates. Transfer applicants must also submit transcripts from all colleges or universities they have attended. New College welcomes transfer applicants. A growing number of students come to New College from Florida's two-year community colleges.

New College tuition is the same as for other institutions within the State University System. Both need-based financial aid and achievement-based scholarships are available to New College students, and about 75% of the students receive some type of direct financial assistance. Students must apply for need-based aid and for USF scholarships. Achievement scholarships from the New College Foundation are awarded by the New College Admissions Office to those students the college believes will make an outstanding contribution to the New College community.

The New College Admissions Office processes applications on a rolling basis, with decisions beginning about December 1. Students applying for need-based financial aid and USF scholarships must apply by February for the fall semester. Application forms and literature can be obtained from the New College Admissions Office, 5700 N. Tamiami Trail, Sarasota, Florida 34243. Phone (813) 355-2963.

Educational Program

The New College degree is awarded for intensive, individualized study in the liberal arts and sciences. Classes, tutorials and independent study projects are tools the student, with faculty guidance, uses to discover and pursue intellectual and career interests. Study at New College culminates in a senior thesis and baccalaureate examination in the student's chosen area of concentration.

New College offers excellent academic facilities. A $6.1 million library opened on the campus in 1986, housing a collection presently numbered at over 200,000 volumes. The library is linked through interlibrary loan to the USF system of over one million volumes, and to a network of thousands of other libraries. It also subscribes to computerized data bases that extend its reach beyond the region. The New College Natural Sciences laboratories, open to students around the clock, feature many research-grade instruments, including a scanning electron microscope. The college has special access to significant biological field research sites in the Sarasota area. Computer facilities available to students range from "user friendly" Macintoshes to an IBM main frame.

Campus-based studies can be supplemented by off-campus field research and internships, and by study abroad. New College participates in the Florida State University Study Centers in London and Florence, as well as in other programs, and has an exchange program with the University of Glasgow.

Areas of Study

All studies at New College lead to the Bachelor of Arts. Students may concentrate in a specific discipline or they may design, with faculty approval, an interdisciplinary concentration. The faculty offers the following areas of study: Anthropology, Art History, Biology, Chemistry, Child Development, Classics, Computer Science, Economics, Environmental Studies, Fine Arts, History, International Relations, Languages, Literature, Mathematics, Medieval & Renaissance Studies, Music, Philosophy, Physics, Political Science, Psychology, Public Policy, Religion, Sociology, Urban Studies.

Elementary through advanced studies in French, German, Russian, Spanish, Latin and Greek language and literature are available.

Study at New College leads to a wide range of careers. Graduates from New College go to medical, dental and law school. A large number do graduate work in the arts and sciences, leading to teaching, research and careers in government and industry. Others obtain advanced degrees in business, education, religion and architecture. Those not going on for advanced degrees have launched successful careers in journalism, fine arts, retailing, management, finances, environmental planning and a host of other fields. Quite a few have become entrepreneurs, founding businesses of their own based on skills acquired while students.

Student Life

New College is a residential college, with the majority of its students living on campus or in adjacent neighborhoods. All students attend full-time. Students are challenged to accept major responsibilities for the direction of their own affairs, including their social and extra-curricular activities. The Student Affairs Office, through its professional staff, is responsible for personal counseling, housing, health services, and other support services.

All first-year students live on campus and participate in the community dining plan. Upper-class students may choose college or non-college housing. A medical plan gives students access to a physician.
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 program that leads to a Bachelor of Science degree with a major in nursing. There are two sequences in the undergraduate program, one for qualified students with no previous preparation in nursing (basic students), and one for registered nurses, who are graduates of diploma or associate degree nursing programs. The basic sequence is designed so that 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 registered nurse sequence is designed so that registered nurses can enroll in the nursing major on a full-time and/or part-time basis on the Tampa campus, or on a part-time basis on the University campuses at Fort Myers, Sarasota, and St. Petersburg. Registered nurses who enroll as full-time students may complete requirements for the bachelor's degree in three semesters. If they enroll as part-time students, the degree requirements can be completed in five to six semesters.

The program is accredited by the National League for Nursing and approved by the Florida State Board of Nursing. Graduates of the basic sequence are eligible to write the qualifying examination for licensure as a registered nurse by the State of Florida Board of Nursing. Graduates also may apply for licensure in other states. Graduates of the undergraduate program have the educational background necessary for graduate study in nursing.

The College of Nursing encourages applications from qualified applicants of both sexes, and from all cultural, racial, religious, ethnic, and age groups. The College of Nursing uses selective criteria for the admission of students. Limitations on enrollments are determined on the basis of availability of sufficient qualified faculty, laboratory and classroom facilities, and clinical teaching resources. Florida residents are given priority.

Professional Nursing Philosophy

Nursing is a profession and a discipline sanctioned by society. Its essential goal is health which is expressed within the context of personal, interpersonal and social systems. The focus for professional nursing is human beings interacting in a variety of environments for the purpose of pursuing health or a dignified death. Nursing is a transactional process which establishes mutually set goals with individuals, groups, families and communities for the purpose of providing health activities and care of the sick, injured, and dying. The complex intellectual processes used by nursing are perceiving, thinking, relating, judging, acting and interacting. These processes require the use of a scientific body of knowledge to assess, plan, implement, and evaluate nursing care.

Concepts which are the central focus for the practice of professional nursing are human beings, society, environment and health.

Human beings are unique and holistic, and are characterized by open systems of transaction with their environment. They are perceptual; purposeful; action, time and goal oriented. Human beings communicate through their use of language and other symbols that reflect individual, group, and societal differences.

Society encompasses individual, group, family and community values, norms and expectations. The United States is a pluralistic, democratic, dynamic society in continuous change as exemplified by increased technological advances. However, the freedom of individuals and groups is protected by the laws and the behavioral norms of this social system.

Environment is comprised of ecosystems which support the interactive process of the personal, interpersonal, and social systems. Nursing systems strive to promote, provide, and support healthy environments as an integral aspect of professional nursing practice.

Health is viewed within the context of dynamic life experiences of individuals, groups, families, and communities. Health implies continuous adjustment to stresses and challenges in the internal and external environment through use of resources in order to achieve maximum potential for optimum functioning. Health is influenced by cultural, social, economic, genetic, political factors as well as value systems and religious beliefs. Human beings have the right to quality health care, the obligation to engage in health practices and the freedom to make informed decisions about their health, health practices, and health care.

Nursing care is an integral component of health care delivery. Professional nurses assume various roles which involve independent, collaborative, interdependent, and dependent functions. Professional nurses provide health services in a variety of complex systems and are accountable for these professional services based on (1) a body of knowledge which is continuously being refined and expanded through nursing research; (2) a Code of Ethics; (3) standards of practice as determined by the profession; and (4) the Nurse Practice Act. Professional nurses provide leadership through participation in professional and community organizations. As responsible citizens, nurses contribute to the promotion of quality health care by participation as knowledgeable members of society in activities that influence the health of individuals, families, groups and communities.

The discipline of nursing is an integral part of the system of higher education and is responsible for the development and dissemination of knowledge. The discipline is also responsible for promoting and preserving the historical and philosophical foundation of the profession. Knowledge is developed through identification of models for systematic thought; constructing and testing theories for nursing; and conducting research. The discipline disseminates knowledge for nursing through scholarly publications and presentations; and through curriculums that prepare for entry into professional practice and for entry into areas of specialized practice and research. In these curriculums the teaching-learning process is a cooperative enterprise in which learners have the freedom to learn and teachers have the freedom to teach. Learning is viewed as a lifelong process of social, psychological, and intellectual growth essential for performing the functions of professional nursing.

UNDERGRADUATE PROGRAM TERMINAL OBJECTIVES

UPON GRADUATION, GRADUATES WILL:

1. Use the nursing process as the basis for nursing practice in primary, secondary and tertiary care settings to assist individual clients, families or groups of clients of all cultures and ages in the promotion and maintenance of health, prevention of illness, coping with actual and perceived threats to health, restoration of health, habilitation and rehabilitation.
2. Participate cooperatively with other health care professionals and community leaders in assessing community health needs and planning and providing essential services.
3. Practice within the legal/ethical parameters of professional nursing.
4. Utilize knowledge of concepts, principles, theories, and models underlying nursing practice to guide clinical decision making.
5. Utilize appropriate principles of leadership in providing leadership within the health care system of the profession.
6. Exercise clinical judgment needed to apply clinical data and research findings from nursing and related fields in nursing practice.

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. The undergraduate program in nursing is an upper division major at the University of South Florida. The University's general education distribution requirements and College of Nursing support courses can be completed on the Tampa campus or at
any local community college, university or college that offers the general education distribution. These can be completed prior to transfer to USF for the nursing major.

Students who enroll at USF in the lower division are admitted to Undergraduate Studies. They must meet the requirements for admission to the University, and should follow the procedures for admission to the University in this Catalog.

Applications for admission to the University may be obtained by contacting the Office of Admissions, University of South Florida, Tampa, Florida 33620. College graduates and transfer students from other undergraduate nursing programs are also eligible for admission to the major on a space available basis. 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 is confirmed and enrollment permitted.

Basic students are admitted in the Fall semester of each year. The deadline for University application is January 4 of the year in which the student plans to enroll. 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 by February 1, prior to the Fall semester. College applications are available from: College of Nursing Admissions Office, University of South Florida, Tampa, Florida 33612.

Registered nurse students are admitted to the College on a more flexible basis contingent upon completion of admission requirements, and the availability of the appropriate sequence of nursing courses on the campus to which they are seeking to pursue coursework. 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 College of Nursing Undergraduate Admission Office.

HONORS PROGRAM

An Honors Program in Nursing is available for highly qualified students. Emphasis is on individual research and creative scholarship and each student is required to complete and defend orally an undergraduate thesis.

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. Students are required to meet the University requirement for foreign language.

Admission Requirements

In order to be considered for full admission to the college, the applicant must:

1. Submit an application to USF by the appropriate deadline.
2. Submit an application and all supporting materials, including transcripts, to the College of Nursing by the appropriate deadline.

3. Maintain a minimum grade point ratio of 2.5 with a grade of "C" or better in each general education support course.
4. Complete prior to enrollment in the major all those general education and specific general education support courses required for admission to the major.
5. Complete all general education support courses with not more than two (2) repeated courses and not more than one (1) repeat of any given course.
6. Complete the College Level Academic Skills Test (CLAST) and the writing and computation course requirements of 6A-10.30.
7. Complete an approved cardiopulmonary resuscitation (BCLS) course prior to enrollment.
8. Provide evidence of computer literacy.
9. Maintain current licensure in Florida if enrolling in the program as a registered nurse.
10. Provide evidence of recent work in nursing 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.

Conditional Admission Policy for Registered Nurses

RN students who have not completed their general education requirements may be admitted conditionally to the College of Nursing. Students may enroll in selected nursing courses while completing these requirements. Nursing courses may be selected from the following:

NUR 3117 Introduction to Professional Nursing
NUR 3007 Nursing Process
NUR 3066C Client Assessment I
NUR 3708 Nursing Concepts in Secondary Care
NUR 3708L Nursing Practicum I
NUR 3829 Ethical/Legal Aspects in Nursing and Health Care
NUR 4185 Introduction to Research

Eligible No student with conditional admission will be allowed to progress to 4707 and 4707L until the general education requirements are met. Students who are admitted conditionally must satisfy written contract requirements.

Specific Course Requirements

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. Suggested courses are also included. 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. 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 Admissions office (813-974-2191).

1. Mathematics/Quantitative Methods: completion of at least one course in mathematics that meets the Gordon Rule requirement and one course in statistics.
   a. Mathematics - one course in college level algebra must be completed with a grade of "C" or better. CLEP subject exams are acceptable.
   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 - 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 2010C, BOT 2010C, ZOO 2010C.

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. Can be partially met with CLEP. CHM 2045, 2046 or "CHM 2030, 2031 Chemistry sequence for non-science majors.

c. Other - the remaining credits can be earned by completing additional courses in biology and chemistry, or in genetics, physics, physical science, etc. (A course in non-quantitative physics is recommended but not required.)

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 psychology, sociology, anthropology, gerontology or human sexual behavior. CLEP is acceptable.

c. Biology - one course. CLEP is not acceptable. APB 3110 or MCB 3010C. The ACT/PEP examination in microbiology is acceptable.

d. Anatomy and Physiology - one course. A combined course in anatomy and physiology which is equivalent to APB 3190 is acceptable or individual courses. The ACT/PEP examination in anatomy and physiology is acceptable.

c. Nutrition - one course. College of Nursing Challenge Examinations or University of Florida correspondence course are acceptable. HUN 2201

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 courses are not offered every semester; therefore, the student should plan his or her enrollment schedule with care.

CLEP Examinations

In accordance with University policies, College Level Examination Program (CLEP) general and subject examinations may be taken in several areas. CLEP examinations must be taken according to the University or community college policies related to CLEP. 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 support courses, including: American Government POS 2041; English Composition ENC 1101, 1102; Biology BSC 2010C, BOT 2010C, ZOO 2010C; General Chemistry CHM 2045; and Statistics STA 2122. Additional information may be obtained from the Office of Evaluation and Testing, University of South Florida.

ACT/PEP and College of Nursing Examinations

Successful completion of the following examination(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 College of Nursing Admissions Office, University of South Florida.

2. Registered nurses who are graduates of diploma programs may receive 23 semester general elective lower level credits through successful completion of the ACT/PEP examinations in nursing. These credits do not apply toward meeting the University requirement of 40 upper level credits, or toward meeting the requirements of the upper level 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 offered by the College of Nursing. Additional information about the 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 23 semester general elective lower level credits for their previous nursing education.

4. Both basic 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, and up to 4 credits in microbiology through successful completion of the ACT/PEP examination in microbiology.

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 support courses (physical, biological, social and political), upper level 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 level work (courses numbered 3000 or above). At least 60 semester hours must be earned from a baccalaureate-degree-granting institution regardless of credit hours transferred from a Community/ Junior College unless prior written approval has been received from the college of the students intended major.

Nursing Courses - Basic Baccalaureate Sequence

Junior Year (3 semesters)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NUR3117</td>
<td>Introduction to Professional Nursing (3)</td>
</tr>
<tr>
<td>NUR3615</td>
<td>Nursing Process I (3)</td>
</tr>
<tr>
<td>NUR3615L</td>
<td>Nursing Intervention I (2)</td>
</tr>
<tr>
<td>NUR3066C</td>
<td>Client Assessment I (2)</td>
</tr>
<tr>
<td>NUR3829</td>
<td>Ethical-Legal Aspects in Nursing and Health Care (2)</td>
</tr>
<tr>
<td>NUR3456</td>
<td>Nursing Process II (2)</td>
</tr>
<tr>
<td>NUR3456L</td>
<td>Nursing Intervention II (3)</td>
</tr>
<tr>
<td>NUR3536</td>
<td>Nursing Process III (2)</td>
</tr>
<tr>
<td>NUR3536L</td>
<td>Nursing Process III (2)</td>
</tr>
<tr>
<td>NUR3067C</td>
<td>Introduction to Community Health Nursing (2)</td>
</tr>
<tr>
<td>NUR4165</td>
<td>Introduction to Research (2)</td>
</tr>
<tr>
<td>NUR4285C</td>
<td>Nursing Process IV (1)</td>
</tr>
<tr>
<td>NUR4256</td>
<td>Nursing Process V (2)</td>
</tr>
<tr>
<td>NUR4256L</td>
<td>Nursing Intervention IV (4)</td>
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Senior Year (2 semesters)

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NUR3835</td>
<td>Leadership-Management Aspects in Community Health Nursing (2)</td>
</tr>
<tr>
<td>NUR4257</td>
<td>Nursing Process VI (2)</td>
</tr>
<tr>
<td>NUR4257L</td>
<td>Nursing Intervention V (6)</td>
</tr>
<tr>
<td>NUR4258</td>
<td>Nursing Process VII (2)</td>
</tr>
</tbody>
</table>
In addition to the requirements listed above, a minimum of 10 credits in upper level electives will be required for graduation: at least six (6) credits in upper level 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 4935, Selected Topics in Nursing, and/or NUR 4905C, Independent Study in Nursing, are currently used for this purpose).

**Nursing Courses - Registered Nurse Sequence**

(3 semesters)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>NUR 3007</td>
<td>Nursing Process (2)</td>
</tr>
<tr>
<td>NUR 3829</td>
<td>Ethical-Legal Aspects of Nursing and Health Care (2)</td>
</tr>
<tr>
<td>NUR 3117</td>
<td>Introduction to Professional Nursing (3)</td>
</tr>
<tr>
<td>NUR 3066C</td>
<td>Client Assessment I (2)</td>
</tr>
<tr>
<td>NUR 3706</td>
<td>Nursing Concepts in Secondary Care (4)</td>
</tr>
<tr>
<td>NUR 3706L</td>
<td>Nursing Practicum I (2)</td>
</tr>
<tr>
<td>NUR 4165</td>
<td>Introduction to Research (2)</td>
</tr>
<tr>
<td>NUR 4707</td>
<td>Nursing Concepts in Primary Care (4)</td>
</tr>
<tr>
<td>NUR 4707L</td>
<td>Nursing Practicum II (3)</td>
</tr>
<tr>
<td>NUR 4943L</td>
<td>Leadership/Management Concepts for Nursing Practice (4)</td>
</tr>
</tbody>
</table>

In addition to the requirements listed, a minimum of 10 credits in upper level electives is required for graduation: at least six (6) credits in upper level 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 4935, Selected Topics in Nursing and/or NUR 4905C, Independent Study in Nursing are currently used for this purpose).
## 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 2016, 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:

- **PR** Prequisite
- **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

6A Courses to satisfy Rule 6A-10.30 (Gordon Rule)

The University reserves the right to substitute, not offer, 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:

**Department/Program**

- **College**
- **Business Administration**
- **Arts and Sciences**
- **Fine Arts**
- **Natural Sciences**
- **Computer Science and Engineering**
- **Mathematics and Statistics**
- **Education**
- **Fine Arts**

**Course Descriptions**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>College</th>
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<tbody>
<tr>
<td>Computers in Education</td>
<td>Education</td>
</tr>
<tr>
<td>Computer Science and Engineering</td>
<td>Engineering</td>
</tr>
<tr>
<td>Computer Service Courses</td>
<td>University-wide Courses</td>
</tr>
<tr>
<td>Cooperative Education</td>
<td>Education</td>
</tr>
<tr>
<td>Content Specializations</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Counselor Education</td>
<td>Education</td>
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<tr>
<td>Criminology</td>
<td>Arts and Sciences</td>
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<tr>
<td>Curriculum and Instruction</td>
<td>Education</td>
</tr>
<tr>
<td>Dance</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Distributive and Marketing Education</td>
<td>Education</td>
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<tr>
<td>Economics</td>
<td>Engineering</td>
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<td>Elementary Education</td>
<td>Engineering</td>
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<tr>
<td>Engineering Technology</td>
<td>Arts and Sciences</td>
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<tr>
<td>English</td>
<td>Education</td>
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<td>English Education</td>
<td>Business Administration</td>
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<td>Finance</td>
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<td>Foreign Language Education</td>
<td>Business Administration</td>
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<td>Foundation Courses in Business (Graduate)</td>
<td>Arts and Sciences</td>
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<tr>
<td>Foundations Education</td>
<td>Arts and Sciences</td>
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<tr>
<td>French (Language)</td>
<td>Engineering</td>
</tr>
<tr>
<td>General Business Administration</td>
<td>Business Administration</td>
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<tr>
<td>General Foreign Languages</td>
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<td>Geography</td>
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<td>Geology</td>
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<tr>
<td>Gerontology</td>
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<td>German (Language)</td>
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<td>Government &amp; International Affairs</td>
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<td>Greek (Classics)</td>
<td>Arts and Sciences</td>
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<td>Hebrew (Language)</td>
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<td>Higher Education</td>
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<td>Arts and Sciences</td>
</tr>
<tr>
<td>Honors Program</td>
<td>University-wide Courses</td>
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<td>Humanities</td>
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<td>Industrial and Management Systems</td>
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<td>Industrial/Technical Education and Information Systems</td>
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<tr>
<td>Japanese (Language)</td>
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- FLE
- EDF, SPS
- EDH
- HUM
- ETA, EVI, EVT
- COP, LIS
- EDF
- HES, LEI, PEQ, PET
- RED
- SCE
- SSE
- EDG, EED, EEX, EGI, ELD, EMR, EPH, EVI

### College of Engineering
- Basic and Interdisciplinary Engineering
  - EGN, EMC
- Chemical Engineering
  - CEG, CES, CGN, CWR, EES, EMA, ENV, TTE
- Computer Science and Engineering
  - CAP, CDA, CGS, CIS, COC, COP, COT, ETL, ESI
  - CAP, CDA, COC, COP
  - ETL, ESI
- Computer Engineering
  - EAS, EMC, EML, ENU

### College of Fine Arts
- Art
  - ARH, ART
- Dance
  - DAA, DAN
- Music
  - MUC, MUG, MUH, MUL
  - MUN, MUS, MUT, MVB, MKV, MVP, MVS, MYY, MVV
- Music Education
  - MUE
- Theatre
  - THE, TPA, TTP

### College of Medicine
- Medicine
  - {CT}3BCC, BMS, GMS, HSC, MEL
- Medical Sciences
  - BMS, GMS

### Cross-Listing Departments/Programs
#### Alphabetically by Prefix

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<td>Yoruba (Language)</td>
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<tr>
<td>ZOO</td>
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### COURSE LEVEL DEFINITION

| Lower Level | 0000-1999 Freshman Level |
| Level | 2000-2999 Sophomore Level |
| Upper Level | 3000-3999 Junior Level |
| Level | 4000-4999 Senior Level |
| Graduate Level | 5000-5999 Senior/Graduate Level |
| Level | 6000-Up Graduate Level |
UNIVERSITY-WIDE COURSES

COOPERATIVE EDUCATION

Associate Director: Ray Easterlin, Assistant Director: L. J. Berman

AEROSPACE STUDIES

Professor: Lt Col Clemens E. Uptmor; Assistant Professors: Capt Steven Hammock, Capt Darryl E. Rogers, Capt Jeffrey M. Plate.

HONORS PROGRAM

Director: Stuart Silverman (Instructors for the Honors courses are recruited from among the University's outstanding teacher-scholars).

MILITARY SCIENCE


OFF-CAMPUS TERM

Director: Stuart Silverman; Lecturer: D. Keith Lupton.

COOPERATIVE EDUCATION

COE 1940 COOPERATIVE EDUCATION, 1ST TRAINING PERIOD (0)
PR: 30 hours of academic credit, acceptance in Cooperative Education Program. (S/U only.)

COE 1941 COOPERATIVE EDUCATION, 2ND TRAINING PERIOD (0)
PR: COE 1940. (S/U only.)

COE 2942 COOPERATIVE EDUCATION, 3RD TRAINING PERIOD (0)
PR: COE 1941. (S/U only.)

COE 2943 COOPERATIVE EDUCATION, 4TH TRAINING PERIOD (0)
PR: COE 2942. (S/U only.)

COE 3944 COOPERATIVE EDUCATION, 5TH TRAINING PERIOD (0)
PR: COE 2943. (S/U only.)

COE 3945 COOPERATIVE EDUCATION, 6TH TRAINING PERIOD (0)
PR: COE 3944. (S/U only.)

COE 4946 COOPERATIVE EDUCATION, 7TH TRAINING PERIOD (0)
PR: COE 3945. (S/U only.)

COE 4947 COOPERATIVE EDUCATION, 8TH TRAINING PERIOD (0)
PR: COE 4946. (S/U only.)

COE 4948 COOPERATIVE EDUCATION, 9TH TRAINING PERIOD (0)
PR: COE 4947. (S/U only.)

COE 4949 COOPERATIVE EDUCATION, 10TH TRAINING EDUCATION (0)
PR: COE 4948. (S/U only.)

AEROSPACE STUDIES

AFR 1101 THE AIR FORCE TODAY ORGANIZATION AND DOCTRINE (1)
Introduction to the Air Force in the contemporary world through a study of its total force structure and mission.

AFR 1120 THE AIR FORCE TODAY STRUCTURE AND ROLES (1)
A study of the strategic offensive and defensive forces, general purpose forces, and aerospace support forces that make up the Air Force of today.

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 nonmilitary operations in support of national objectives. Emphasis is on the period from post WWI to 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 (officer-ship). 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 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 2001 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.

OFF-CAMPUS TERM

IDS 4900 DIRECTED READINGS (1-4)
PR: OCT Program approval. Open to all students approved for OCT
<table>
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<th>Course Code</th>
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<th>Credits</th>
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<tr>
<td>IDH 2010</td>
<td>ACQUISITION OF KNOWLEDGE</td>
<td>3</td>
<td>PR: 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.</td>
</tr>
<tr>
<td>IDH 3100</td>
<td>ARTS/HUMANITIES HONORS</td>
<td>3</td>
<td>PR: IDH 2010. An introduction to western arts and letters from the perspectives of three period's 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.</td>
</tr>
<tr>
<td>IDH 3350</td>
<td>NATURAL SCIENCES HONORS</td>
<td>3</td>
<td>PR: IDH 2010. Restricted to University Honors Students. An exploration of current knowledge concerning fundamental principles in the Sciences, their potential for application and attendant ethical and philosophical questions.</td>
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<tr>
<td>IDH 3400</td>
<td>SOCIAL AND BEHAVIORAL SCIENCES HONORS</td>
<td>3</td>
<td>PR: IDH 2010. Introduction to the concerns of the Social and Behavioral Sciences, methods of inquiry, discovery, and validation of knowledge. A survey of the various disciplines examine the question of how society is organized.</td>
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<tr>
<td>IDH 3500</td>
<td>SEMINAR IN APPLIED ETHICS</td>
<td>3</td>
<td>PR: IDH 2010. Restricted to University Honors Students. This course explores ethical issues related to selected topics such as Ethics of Technology, Ethics in Business, Bio-Medical Ethics, Personal Ethics Development.</td>
</tr>
<tr>
<td>IDH 3990</td>
<td>HONORS PROGRAM SEMINAR</td>
<td>3</td>
<td>PR: IDH 2010. A course designed to prepare students for independent research. The class will be responsible for determining course content and requirements under the supervision of a faculty mentor. This course is taken for 2 semesters.</td>
</tr>
<tr>
<td>MIS 1400</td>
<td>FUNDAMENTALS OF LEADERSHIP DEVELOPMENT</td>
<td>1</td>
<td>Basic leadership techniques and principles, professional ethics, senior-subordinate relationships, leadership problems, basic counseling and management techniques. An optional two hour weekly laboratory with emphasis on adventure skills, such as rappelling, physical training and weapons is offered.</td>
</tr>
<tr>
<td>MIS 2601</td>
<td>MILITARY TRAINING MANAGEMENT AND INSTRUCTIONAL TECHNIQUES</td>
<td>1</td>
<td>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 of instruction will be an integral part of the course. An optional two hour weekly Laboratory with emphasis on adventure skills such as rappelling, physical training, and weapons is offered.</td>
</tr>
<tr>
<td>MIS 2940</td>
<td>INTENSIFIED BASIC SKILLS COURSE</td>
<td>4</td>
<td>An intense summer program conducted at Fort Knox, Kentucky for six weeks. Designed as an alternative method to meet the prerequisites of the Advance Course for students who have no basic Military Science courses. (S/U only).</td>
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<tr>
<td>MIS 3302</td>
<td>SMALL UNIT OPERATIONS</td>
<td>3</td>
<td>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. Also provides exposure to military weapons and communications systems found at this level. Students must attend a two hour Leadership Laboratory weekly.</td>
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<tr>
<td>MIS 3404</td>
<td>LEADERSHIP FUNDAMENTALS - TACTICS AND CAMP PREPARATION</td>
<td>3</td>
<td>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. Major emphasis during course is placed on physical training and field training exercises. Student must attend a two hour Leadership Laboratory weekly.</td>
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<tr>
<td>MIS 4002</td>
<td>ARMY AS A PROFESSION</td>
<td>2</td>
<td>Designed to prepare cadets for duty as commissioned officers. Instruction centers around proficiency/familiarization with the military justice system, military administration, the Officer Professional Management System, international laws of war, and principles of management/leadership.</td>
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<tr>
<td>MIS 4421</td>
<td>SEMINAR IN MILITARY LEADERSHIP &amp; MANAGEMENT</td>
<td>3</td>
<td>Provides a basic understanding of the professional soldier's responsibilities to the Army and the nation. Attempts to improve ethical decision-making skills through an examination of the need for ethical conduct, greater awareness and sensitivity to ethical issues, and the opportunity to apply these abilities in real world case study situations. Included are seminars to acquaint the new lieutenant with his/her relationship to NCOs, company grade officers, and senior officers.</td>
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COLLEGE OF ARTS AND SCIENCES

AFRICAN AND AFRO-AMERICAN STUDIES
Director: F. U. Ochaebulam; Professor: F. U. Ochaebulam; Associate Professor: K. R. Glover; Other Faculty: P. Taylor.

AMERICAN STUDIES
Chairperson: J. B. Moore; Professors: J. B. Moore, R. E. Snyder; Associate Professor: R. A. Banes; Assistant Professor: P. J. Brewer; Other Faculty: S. A. Zylstra.

ANTHROPOLOGY

ASTRONOMY
Director: C. A. Williams; Professor: C. A. Williams (Mathematics Department), Visiting Professor: G. Hammond.

BACHELOR OF INDEPENDENT STUDIES
Director: K. E. Kearney; Area Coordinators: J. Bell (BIS Humanities), H. Mushinsky (BIS Natural Sciences), P. Waterman (BIS Social and Behavioral Sciences).

BIOLOGY

CHEMISTRY

CLASSICS
Chairperson: A. L. Motto; Professor: A. L. Motto; Associate Professor: J. D. Noonan; Assistant Professor: J. S. Campbell, S. R. Mandell; Courtesy Professor: A. Starr; Other Faculty: J. R. Clark, W. M. Murray, J. F. Strange, G. K. Tipps.

COMMUNICATION

COMMUNICATION SCIENCES AND DISORDERS

CRIMINOLOGY

ENGLISH

GEOGRAPHY

GEOLOGY

GERONTOLOGY

HISTORY
HUMANITIES
Chairperson: A. J. Sparks; Professors: C. B. Cooper, S. L. Gaggi, T. B. Hoffman, H. Juergensen, G. S. Kashin (Emeritus), E. M. MacKay (Emeritus), D. Rutenburg, A. J. Sparks, S. A. Zylstra; Assistant Professor: J. D’Emilio; Courtesy Professor: Laa zo J. Hety ny.

HUMAN SERVICES

INTERDISCIPLINARY SOCIAL SCIENCES

INTERNATIONAL STUDIES
Director: M.M. Amen; Professors: C. W. Arndt, H. W. Nelsen, M. T. Cott; Associate Professors: M. A. R. Barshy, A. Hachchiche, S. M. Northcutt, D. Sluder; Associate Professors: E. Conteh-Morgan, P. Ruffin; Assistant Professor Emeritus: J. W. Palm; Joint Appointments: Professors F. J. Chaeboulam, S. D. Stamps, H. Vanden; Associate Professor: K. R. Glover, R. Khator; Assistant Professor: M. Milan.

LANGUAGE

LINGUISTICS

MARINE SCIENCE

MATH COMMUNICATIONS

MATHEMATICS

MEDICAL TECHNOLOGY
Director: E. D. Olsen; Professors: F. E. Friedl, E. D. Olsen; Associate Professor: S. H. Grossman, D. T. Testrake; Assistant Professors: D. D. Dunigan, R. L. Potter; Professors Emeriti: K. W. Barwick (Baptist Medical Center), I. L. Browarsky (Tampa General Hospital), W. Burgett (Tallahassee Memorial Regional Medical Center), L. J. Davis, (Bayfront Medical Center), N. M. Hardy (University Medical Center/Jacksonville), R. F. Holcomb (Florida Hospital), F. C. Holland (Baptist Medical Center), R. Poppe, Jr. (Mount Sinai Medical Center); Courtesy Lecturers: G. A. Atz (Baptist Medical Center), P. DiStefano (Tampa General Hospital), W. M. Duquette (Mt. Sinai Medical Center), L. Peel (Bayfront Medical Center), A. Palage (Tallahassee Memorial Regional Medical Center), P. Rogers (Florida Hospital), J. D. Sigas (University Medical Center/Jacksonville).

PHILOSOPHY

PHYSICS

POLITICAL SCIENCE

PSYCHOLOGY
## PUBLIC ADMINISTRATION

Professors: J. E. Jreisat, S. A. MacManus, D. C. Menzel; Assistant Professors: J. L. Daly, M. Y. Mongkuo, D. Rahm.

## REHABILITATION COUNSELING

Chairperson: C. M. Pinkard; Professors: J. F. Dickman, W. G. Emener, J. D. Rasch; Associate Professors: P. Gross, M. J. Landsman, C. M. Pinkard, T. J. Wright.

## RELIGIOUS STUDIES

Chairperson: W. C. Tremmel; Professors: D. J. Fasching, N. Katz, W. M. Shea, J. F. Strange, W. C. Tremmel; Graduate Research Professor: J. Neusner; Associate Professor: M. G. Mitchell; Visiting Instructor: C. Kilgore; Other Faculty: J. S. Hatcher, E. E. Smith.

## SOCIAL WORK

Chairperson: B. L. Yedids; Professor: T. J. Northcutt, Jr.; Associate Professors: J. A. Giordano, T. U. Hancock, W. S. Hutchinson, Jr., A. A. Smith, P. L. Smith, R. J. Wilk, B. L. Yedids; Assistant Professors: E. B. Breit, P. A. d'Oronzio, C. S. Roberts, K. Sohn; Courtesy Faculty: Professor: J. I. Kosberg; Associate Professor: M. L. Coulter.

## SOCIOLOGY

Coordinator: J. B. Snook; Professors: L. L. McAllister, J. Ochshorn; Associate Professors: M. Myerson, J. B. Snook; Assistant Professors: J. E. Borchert, E. B. Breit, K. Vaz; Courtesy Associate Professors: R. A. Banes, L. M. Whiteford.

## WOMEN'S STUDIES

Coordinator: T. J. Fasching; Associate Professors: J. E. Borchert, E. B. Breit, K. Vaz.

## AFRICAN AND AFRO-AMERICAN STUDIES

### AFA 2001 INTRODUCTION TO THE BLACK EXPERIENCE [IN AFRICA AND ITS DIAPOSITA] - 6A

Fundamental perspectives on the nature and significance of the Black Experience in Africa and the black communities in the Americas.

### AFA 4150 AFRICA AND THE UNITED STATES

An examination of the historical and current political, economic, and cultural relations between the United States and Africa. (Also listed under International Studies.)

### AFA 4331 SOCIAL INSTITUTIONS AND THE GHETTO

A study of social institutions as they relate to the American Black ghetto, with emphasis on social systems operating within and on the ghetto.

### AFA 4335 BLACK WOMEN IN AMERICA

An interdisciplinary survey of the contemporary experience of black women in America, including the African roots, myths and realities surrounding that experience. (Also listed under Women's Studies.)

### AFA 4900 DIRECTED READINGS

Independent readings in a particular area of African and Afro-American Studies, selected by student and instructor.

### AFA 4931 SELECTED TOPICS IN AFRO-AMERICAN STUDIES

Topics offered are selected to reflect student needs and faculty interests. In depth study in such areas as the Black Student and the American Educational Process; the Black Experience in the Americas; European Expansion in Africa to 19th century; Contemporary Economic Problems in Africa.

### AFH 3100 INTRODUCTION TO AFRICAN HISTORY

An outline survey of pre-colonial African history including a prefatory introduction to the use of primary sources (such as archaeology, oral tradition, cultural anthropology, comparative linguistics, documents in reconstructing the African past. (Also listed under History.)

### AFH 3200 AFRICAN HISTORY SINCE 1850

Survey of the colonial and post-colonial history of Africa. Emphasis on the impact of European and other alien influences on the continent, emergence of independent African states and post-independence problems of nation building and economic development. (Also listed under History.)

### AMH 3571, 3572 AFRO-AMERICAN HISTORY

A survey of the Afro-American history in the Western Hemisphere. Emphasis on the experience in North America (AMH 3571, 1493-1865; AMH 3572 1865-to present).

### CPO 4204 GOVERNMENT AND POLITICS OF AFRICA

Designed to provide the information and analytical tools necessary to interpret current Sub-Saharan African politics. Survey of political organization in traditional African societies; politics under colonial rule; the struggle for independence, and post-independence politics.

### CPO 4244 GOVERNMENT AND POLITICS OF EAST, CENTRAL AND SOUTHERN AFRICA

In depth study of political developments, ideologies and modernization in East, Central and Southern Africa including race relations and white minority rule in Southern Africa.

### HUM 3420 ARTS AND MUSIC OF THE AFRICAN PEOPLE

An examination of the visual arts painting, sculpture, architecture and music of Sub-Saharan Africa; their meaning and impact on the arts and music of the Western World.

### INR 4254 AFRICA IN WORLD POLITICS

Study of international relations in the new Africa including the relations of the new states with major world powers and their role in the United Nations.

### PHM 4120 CONTEMPORARY BLACK PHILOSOPHY

Major themes and participants in the Black liberation movement since 1900.

### PUP 3313 MAJOR BLACK THINKERS

Survey of major themes of black leaders of thought and participants in the global black liberation movement.

## AMERICAN STUDIES

### 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, popular music, American communities, vigilant 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 - 6A

Integration of major aspects of American life between the 1880s and World War I. Should be taken the first time a student becomes an American Studies major. Elective for non-majors.

### AMS 3201 THE COLONIAL PERIOD

An examination of cultural patterns in America as they developed between 1600 and 1780 with an emphasis on the texture of everyday life. 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 environ-
ment are stressed.

AMS 3370 SOUTHERN WOMEN: MYTH AND REALITY - 6A (3)
An analysis of the myths surrounding Southern Women, this course will identify these myths, discern their sources and purposes, and contrast them with history. (Also offered under Women's Studies.)

AMS 3700 RACISM IN AMERICAN SOCIETY (3)
An introduction into the causes and effects of racism in American history, literature, art, the media, and folklore. Related concepts of ethnocentrism and class conflict will also be studied.

AMS 3930 SELECTED TOPICS IN AMERICAN STUDIES (1-4)
Offerings include Cultural Darwinism in America, America Through Foreign Eyes, Material Culture in American Society, and The Female Hero in American Culture.

AMS 4910 INDIVIDUAL RESEARCH (1-4)
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 (1-4)
Offerings include American Painting: Its social implications, Technology in Twentieth Century America, American Environmental Problems, Popular Culture in America, American Military Experience, and Labor in America. PR: Senior in American Studies or Cl.

AMS 4935 SENIOR SEMINAR IN AMERICAN STUDIES (4)
PR: Senior in American Studies or Cl.

AMS 4936 SENIOR SEMINAR IN AMERICAN STUDIES (4)
PR: AMS 4935 or Cl.

PGY 3000 PHOTOGRAPHY IN AMERICAN CULTURE (3)
A survey of photography as an art and a craft in America since the mid-nineteenth century. Attention devoted to technological innovations, leading personalities, major movements, and memorable icons. Open to majors and non-majors.

ANCIENT STUDIES

ANTHROPOLOGY

ANT 1001 THE HUMAN ADVENTURE (2)
This course examines the anthropological evidence relevant to controversial questions concerning human origins, social practices, human and animal communication, and ancient societies. Not for major credit.

ANT 2000 INTRODUCTION TO ANTHROPOLOGY (3)
The cross-cultural study of the human species in biological and social perspective. Surveys the four major branches of anthropology: physical anthropology (human biology), archaeology (the analysis of the prehistoric and historic remains of human cultures), anthropological linguistics (the analysis of language in its cultural context), and cultural anthropology (the cross-cultural study of peoples living in the world today, be they in tribal, peasant, or urban societies).

ANT 3005 THE ANTHROPOLOGICAL PERSPECTIVE (3)
For non-anthropology majors only. Presents the basic concepts of anthropology as they are relevant to contemporary life. Aims at enabling the student to understand the anthropologist's crosscultural view of the human species as adapting through biosocial means to life on this planet. May not be counted for credit toward an anthropology major.

ANT 3100 ARCHAEOLOGY (3)
PR: ANT 2000 or Cl. The cross-cultural study of humankind from its beginnings up to and including the historic period through the recovery, description, and analysis of the remains of past cultures and societies.

ANT 3410 CULTURAL ANTHROPOLOGY (3)
PR: ANT 2000 or Cl. Discussion of major methods and orientations to the cross-cultural study of the world's peoples. Representative case studies are used to demonstrate variations in human adaptations and to encourage an appreciation of diverse values and lifestyles.

ANT 3811 BIOLOGICAL ANTHROPOLOGY (3)
PR: ANT 2000 or Cl. Non-human primates, the fossil record and the biology of races are surveyed in order to understand the human animal as a product of biosocial phenomena. Anatomy, genetics, culture and evolution are emphasized.

ANT 3610 ANTHROPOLOGICAL LINGUISTICS (3)
PR: ANT 2000 or Cl. The comparative study of language in its cultural context, especially emphasizing the role of language in the cultural interpretation of physical and social reality.

ANT 4034 THEORIES OF CULTURE (3)
PR: Senior standing with major in anthropology or equivalent. The major concepts that form the anthropological view of humanity are surveyed in historical perspective. Basic ideas of the Western philosophical tradition are analyzed from the Greeks to the 19th century when they became incorporated into the new discipline of anthropology. 20th century anthropological developments on these themes are considered.

ANT 4124 ARCHAEOLOGICAL FIELD METHODS (4)
PR: ANT 3100 or Cl. Normally offered as part of a Summer Field Session. Students also take Florida Archaeology and Laboratory Methods in Archaeology. Emphasis on appropriate methods of archaeological excavation and recovery and recording of data.

ANT 4153 NORTH AMERICAN ARCHAEOLOGY - 6A (3)
PR: ANT 3100 or Cl. An examination of the evidence regarding the human settlement of North America from its beginnings through the development of aboriginal culture to the period of European conquest. Emphasis on the comparative study of material culture at selected sites from all time periods. No field work is involved.

ANT 4158 FLORIDA ARCHAEOLOGY (4)
PR: ANT 3100 or Cl. The content of prehistoric cultures such as Paleolindian, Weeden Island, and Safety Harbor are reviewed and examined in terms of their temporal and spatial relationships to each other and the Eastern U.S. Normally offered as part of a Summer Field Session. Students also take Field Methods in Archaeology and Laboratory Methods in Archaeology.

ANT 4162 SOUTH AMERICAN ARCHAEOLOGY (3)
PR: ANT 3100 or Cl. Describes and analyzes the sequence of cultural development in prehistoric South America. Cultures such as the Inca, Chavin, Mochica, Wari, Chimú are included. Emphasis on the environmental setting and the relationship between cultural ecology and the growth of civilization.

ANT 4172 HISTORICAL ARCHAEOLOGY - 6A (3)
PR: ANT 3100 or Cl. A survey and analysis of archaeology focused on the historic period. Laboratory research with data recovered from historic sites in addition to classwork.

ANT 4180 LABORATORY METHODS IN ARCHAEOLOGY (4)
PR: ANT 3100 or Cl. Normally offered as part of a Summer Field Session. Students also enroll in Florida Archaeology and Field Methods in Archaeology. Data recovered in excavation are cleaned, catalogued, identified, and analyzed in the laboratory.

ANT 4181 MUSEUM METHODS (4)
PR: ANT 3100 and Cl. Design, preparation and installation of exhibits in the Department of Anthropology Teaching Exhibit Gallery. Emphasis on theory, research, design, and construction. Discussion of museum-related issues such as administration and curation.

ANT 4226 ANTHROPOLOGY OF ART - 6A (3)
PR: ANT 3410 or Cl. An examination of the relationship between the visual arts (sculpture, painting, masks, carving, etc.) and culture in non-Western societies. Emphasis on formal symbolic and functional comparative analysis of specific art styles based on cross-cultural materials. Consideration of diffusion and change of art forms, commercial and ethnic arts, and role of the artist.

ANT 4231 FOLKLORE - 6A (3)
PR: ANT 3410 or Cl. Focuses on cross-cultural methods and techniques regarding the collection, classification, and analysis of such materials as myths, jokes, games, and items of material culture.
ANT 4241 MAGIC AND RELIGION - 6A  
PR: ANT 3410 or CI. The crosscultural study of the social and cultural aspects of religion. Religious activities in traditional and modern societies will be discussed. Ritual behavior, religious practitioners and symbols of belief will be considered in light of their impact on the social, political or economic aspects of peoples' lives.

ANT 4302 SEX ROLES IN CROSS-CULTURAL PERSPECTIVE  
PR: ANT 3410 or CI. Focuses on various theories, models and beliefs about male-female behaviors and interactions in human cultures throughout history and in various societies in the world today. (Also offered under Women's Studies.)

ANT 4305 VISUAL ANTHROPOLOGY  
PR: ANT 3410 or CI. The use of photographic techniques for the crosscultural recording and analysis of human activities. The study of ethnographic photography as both art and science, and the production of an anthropological study that expresses the goal of visual literacy. Review and evaluation of the uses of visual techniques and the evidence they provide to the social scientist.

ANT 4312 NORTH AMERICAN INDIANS  
PR: ANT 3410 or CI. An examination of the evidence for the origin and antiquity of human beings in North America and of patterns of regional development until the period of contact with European colonists. Emphasis on varieties of ecological adaptation, social, political and religious systems, enculturation and worldview, folklore and visual art.

ANT 4316 THE UNITED STATES  
PR: ANT 3410 or CI. Special concerns include the American community, change and continuity in American values and lifestyles, and the historical background and recent manifestations of human problems in the United States.

ANT 4326 MEXICO AND CENTRAL AMERICA - 6A  
PR: ANT 3410 or CI. Focuses on the history, contemporary values and interpersonal relationships, and patterns of rural and urban life in Mesoamerica. Guatemala and Mexico are emphasized.

ANT 4340 THE CARIBBEAN - 6A  
PR: ANT 3410 or CI. Main themes include: the depopulation of the aboriginal population and the resettlement of the area via slavery, indenture, and migration; contemporary ethnic heterogeneity; economic problems of Third World microstates; development of a modern social and political consciousness. Religious diversity, music, the graphic arts, and the literature of the contemporary Caribbean will also be surveyed.

ANT 4357 THE MIDDLE EAST  
PR: ANT 3410 or CI. Delineates the environment and cultural ecology of the Middle East and analyzes how they have influenced the variety of subcultures of the region. The rise and fall of the "little tradition" of the enduring folk cultures will be analyzed. Contemporary culture change will be analyzed in a temporal perspective.

ANT 4432 THE INDIVIDUAL AND CULTURE - 6A  
PR: ANT 3410 or CI. The relationship between the individual and society is studied crossculturally. Main themes include child-rearing practices, psychosomatic illness and curing. Discussion of theories and models of personality development with special reference to their applicability to the emerging field of cross-cultural mental health planning.

ANT 4442 URBAN LIFE AND CULTURE  
PR: ANT 3410 or CI. The crosscultural study of urbanization, urbanism and human problems associated with metropolitan environments. Emphasis on the ethnography of city life and its relationship to the practical applications of urban research.

ANT 4462 HEALTH, ILLNESS, AND CULTURE  
PR: ANT 3410 or CI. The study of health and human behavior in crosscultural perspective. Main themes include: the impact of disease; ANT 3410 or CI. The crosscultural study of urbanization, urbanism, and human problems associated with metropolitan environments. Emphasis on the ethnography of city life and its relationship to the practical applications of urban research.
PR: Cl. The student under the supervision of a faculty member will formalize, conduct, analyze, and report in writing a research project in anthropology. (S/U only.)

ANT 5904 DIRECTED READING (1-4)
PR: Cl. Individual guidance in concentrated reading on a selected topic in anthropology. Contract required prior to registration.

ANT 5915 INDIVIDUAL RESEARCH (2-4)
PR: Cl. Individual guidance in a selected research project. Contract required prior to registration.

ANT 5937 SEMINAR IN ANTHROPOLOGY (2-4)
PR: Graduate standing. Topics to be chosen by students and instructor.

MTH 4521 FOLK MUSIC (3)
PR: ANT 4010 or Cl. Examines ethnic musics in America, emphasizing the functions of folk music in rural and urban settings. Materials drawn cross-culturally are studied in both religious and secular forms. When feasible, classwork is supplemented by live performances.

ASTRONOMY

AST 2005 ASTRONOMY OF THE SOLAR SYSTEM (4)
Introduction to the Astronomy of the Solar System. No Physics background assumed. Topics covered include properties of light, stellar coordinates, timekeeping, eclipses, formation and dynamics of the solar system, properties of the sun and planets, space exploration of planets and the moon, life on other worlds. This course is complementary to but independent of AST 2006. Either may be taken before the other or taken by itself.

AST 2006 STELLAR ASTRONOMY AND COSMOLOGY (4)
An introduction to Astrophysics and the structure of the universe. No Physics background assumed. Topics covered include properties of light, stellar coordinates, measurement of the physical properties of stars, formation, structure and evolution of stars, normal and peculiar galaxies, cosmology. This course is complementary to but independent of AST 2005. Either may be taken before the other or taken by itself.

AST 2032C ILLUSTRATIVE ASTRONOMY (3)
Constellations, use of small telescopes, etc., apparent motions of celestial objects, comets and meteors, seasons, weather. Current events in the space program. Planetarium and open sky demonstrations. Lab-lab.

AST 3033 CONTEMPORARY THINKING IN ASTRONOMY (3)
PR: Junior or Senior Standing or Cl. Seminar designed to assist the layman, with no scientific background, in comprehending contemporary developments in Astronomy. Necessary background material is provided by the instructor and a text. Topics covered in recent years include the space program, pulsars, x-ray astronomy, black holes, extra-terrestrial life, interacting galaxies, cosmology.

AST 3044C ARCHAEOASTRONOMY (3)
PR: Jr. or Sr. Standing or Cl. Astronomical concepts and observational techniques used by prehistoric/ancient peoples for detecting change of seasons, constructing calendars, predicting eclipses, etc. Particular attention is given to Stonehenge, and to works of N.A. Indians, the Maya and Aztecs, and the Egyptians. Lab-lab.

AST 3652 NAVIGATION (3)
PR: Some knowledge of geometry, algebra, and trigonometry. Timekeeping, use of sextant, constellations, celestial navigation with minimum equipment, spherical astronomy.

AST 3930 SELECTED TOPICS IN ASTRONOMY (1-4)
PR: Cl. Course content will depend upon the interest of the faculty member and student demand. May be repeated up to 8 credit hours.

AST 3950 INTRODUCTION TO CELESTIAL MECHANICS (3)
PR: MAC 3313 or MAC 3283 and some knowledge of differential equations, or Cl. The two-body problem, introduction to Hamiltonian systems and canonical variables, equilibrium solutions and stability, elements of perturbation theory.

AST 5932 SELECTED TOPICS IN ASTRONOMY (1-5)
PR: Senior or advanced junior standing or Cl. Intensive coverage of special topics to suit needs of advanced students.

BIOLOGY

APB 1150 PRINCIPLES OF BIOLOGY FOR NON-MAJORS (3)
Lectures and demonstrations of selected biological principles, usually taught by television. For non-majors only. No credit for Biology Majors.

APB 2130 ENVIRONMENT (3)
The application of basic principles of ecology to relevant problems and topics relating to man's environmental interaction through consideration of scientific and popular literature. For non-majors. May be taken by majors for free elective credit.

APB 2140 FOOD AND DRUGS (3)
The application of basic biological principles to relevant problems and topics in nutrition and drugs through the consideration of scientific and popular literature. For non-majors. May be taken by majors for free elective credit.

APB 2250 SEX, REPRODUCTION AND POPULATION (3)
The application of basic biological principles from subject areas to relevant problems and topics through the consideration of scientific and popular literature. For non-majors. May be taken by majors for free elective credit.

APB 3110 MAN, MICROBE AND MOLECULE (3)

BOT 2010C FUNDAMENTALS OF BOTANY (4)
PR: BSC 2010C. Cell division, genetics, reproduction and development, physiology. Lec.-lab. (Spring & Fall).

BSC 2010D FUNDAMENTALS OF BIOLOGY I (4)
An analysis of biological systems at the organismal and supraorganismic levels: unity and diversity of life, organismal structure and function, and ecology. The course is recommended to be taken before Fundamentals of Biology II (BSC 211). This course is restricted to majors and has a laboratory associated with the lecture.

BSC 2011 FUNDAMENTALS OF BIOLOGY II (4)
PR: BSC 2010D. An analysis of biological systems at the cellular and subcellular levels: cell structure and function, respiration, photosynthesis, mitosis and meiosis, genetics, gene expression, and evolution. The course is restricted to majors and has a laboratory associated with the lecture.

BSC 2932 SELECTED TOPICS IN BIOLOGY (1-4)
May be repeated.

BSC 3263 INTRODUCTION TO MARINE BIOLOGY (3)
PR: 1 year major's Biology. A survey of the marine environment, the types of organisms found inhabiting a variety of marine habitats, and the adaptations of the organisms to those habitats. Emphasis is placed on shallow water Florida environments.

BSC 4905 INDEPENDENT STUDY (1-3)
PR: Cl and CC. Specialized independent study determined by the student's needs and interests. The written contract required by the College of Natural Sciences specifies the regulations governing independent study. May be repeated. (S/U only.)

BSC 4910 UNDERGRADUATE RESEARCH (1-4)
PR: Cl and CC. Individual investigation with faculty supervision. (S/U only.)

BSC 4930 SEMINAR IN BIOLOGY (1)
Senior or advanced junior standing. May be repeated once. (S/U only.)

BSC 4933 SELECTED TOPICS IN BIOLOGY (1-3)
BSC 4931 SELECTED TOPICS IN BIOLOGY (1-3)
Each topic is a course in directed study under supervision of faculty member.

PCB 3023C CELL BIOLOGY (4)
PR: CHM 3211, CHM 3211L and PCB 3063. A discussion of the concept and significance of the cell to biology; biological molecules and metabolic processes within the cell; cellular energy conversion systems; and control of cellular metabolism. Lec.-lab.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>PCB 3063</td>
<td>GENERAL GENETICS</td>
<td>(3)</td>
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<tr>
<td></td>
<td>PR: 1 year major's Biology. Introduction to genetics including the fundamental concepts of Mendelian, molecular and population genetics. Lec.-dis.</td>
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<tr>
<td>PCB 4043C</td>
<td>PRINCIPLES OF ECOLOGY</td>
<td>(3)</td>
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<td>PR: 1 year major's Biology. An introduction to the basic principles and concepts of ecology at the ecosystem, community, and population level of organization. Lec.-dis.</td>
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<tr>
<td>PCB 4064</td>
<td>EXPERIMENTAL GENETICS</td>
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<td>PR: PCB 3063. Experimental analysis of genetic systems, Lec.-lab.</td>
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<tr>
<td>PCB 4253C</td>
<td>DEVELOPMENTAL BIOLOGY</td>
<td>(3)</td>
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<td>PR: PCB 3023C. Topics in modern developmental biology to be covered in lecture and through readings so as to gain a working knowledge and understanding of the cellular and molecular mechanisms of cell differentiation in both plants and animals.</td>
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<tr>
<td>PCB 4674</td>
<td>ORGANIC EVOLUTION</td>
<td>(3)</td>
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<td></td>
<td>PR: PCB 3063. An introduction to modern evolutionary theory. Lecture on population genetics, adaptations, speciation theory, phylogeny, human evolution and related areas. Lec.-dis.</td>
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<tr>
<td>PCB 5115C</td>
<td>CYTOGENETICS</td>
<td>(3)</td>
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<td></td>
<td>PR: PCB 3023C. Survey of the structure and function of cytoplasmic and nuclear components of plant and animal cells. Lec.-lab.</td>
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<tr>
<td>PCB 5235C</td>
<td>PRINCIPLES OF IMMUNOLOGY</td>
<td>(3)</td>
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<td>PR: PCB 3023 or MCB 3030C. Course will emphasize the biological principles involved in the vertebrate immune response. It will present the homeostatic, defense, and detrimental aspects of the immune system, in terms of basic cellular and molecular mechanisms. Techniques will be described to familiarize the student with the types of immunological tools available to the cellular and molecular biologist.</td>
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<tr>
<td>PCB 5415</td>
<td>BEHAVIORAL ECOLOGY</td>
<td>(3)</td>
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<td></td>
<td>PR: ZOO 3203C, PCB 4043. An emphasis on the evolutionary mechanisms that influence an organism's behavioral responses to environmental events. The theoretical framework is presented and analyzed. Intended for majors.</td>
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<tr>
<td>PCB 5525C</td>
<td>MOLECULAR GENETICS</td>
<td>(3)</td>
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<td></td>
<td>PR: PCB 3023C. Detailed examination of DNA, RNA and protein synthesis; the effects of mutations on proteins, cellular control; selected aspects of viral, bacterial, and fungal genetics.</td>
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<tr>
<td>PCB 5515</td>
<td>EVOLUTIONARY GENETICS</td>
<td>(3)</td>
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<td></td>
<td>PR: PCB 3063. Examination of factors such as mutation, migration, natural selection, and genetic drift which modify the genetic structure of populations.</td>
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<tr>
<td>PCB 5535C</td>
<td>NEUROPHYSIOLOGY</td>
<td>(3)</td>
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<td></td>
<td>PR: PCB 3023C. A comparative analysis of the physiobiological basis and evolution of nervous systems and sensory mechanisms.</td>
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<tr>
<td>PCB 5545C</td>
<td>PRINCIPLES OF NEUROSCIENCE</td>
<td>(3)</td>
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<td></td>
<td>PR: PCB 4743C. Study of the mammalian brain's structure and function, with an emphasis on the neuroanatomy, neuropharmacology, and neurophysiology of the human brain.</td>
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**Botany**

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>BOT 3143C</td>
<td>FIELD BOTANY</td>
<td>(3)</td>
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<tr>
<td></td>
<td>PR: BOT 3373. Identification and classification of native and naturalized flowering plants of Florida including historical, climatic and floristic aspects of plant communities. Conducted largely in the field. Lec.-lab. (3)</td>
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<tr>
<td>BOT 3373</td>
<td>VASCULAR PLANTS: FORM AND FUNCTION</td>
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<tr>
<td></td>
<td>PR: BSC 2010, BSC 2011. Introduction to the morphology, adaptation and evolution of vascular plants, integrating form and function to understand diversity.</td>
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<tr>
<td>BOT 3810</td>
<td>ECONOMIC BOTANY</td>
<td>(3)</td>
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<td></td>
<td>PR: BOT 3373. Study of the uses of plants by man for food, chemicals, fibers, and medicines. Open to majors and non-majors.</td>
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<tr>
<td>BOT 3823C</td>
<td>HORTICULTURAL BOTANY</td>
<td>(2)</td>
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<td></td>
<td>PR: Course in botany or biology. Application of principles of botany to give an understanding of basic horticultural operations; seed sowing, dormancy, growth requirements, vegetative propagation, pruning, and related problems. Lec.-lab.</td>
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**Microbiology**

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<tbody>
<tr>
<td>MCB 3030C</td>
<td>GENERAL MICROBIOLOGY</td>
<td>(4)</td>
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<tr>
<td></td>
<td>PR: BSC 2010C and 1 year College Chemistry. Organic chemistry and a course in genetics is recommended. Introduction to the biology of microorganisms: structure, physiology, and ecology of bacteria, algae, viruses, protozoa and lower fungi. The laboratory involves preparation of culture media, staining, pure culture methodology, isolation of microbes from nature, enumeration techniques, resistance to infectious disease. Lec.-lab.</td>
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<tr>
<td>MCB 4115</td>
<td>DETERMINATIVE BACTERIOLOGY</td>
<td>(5)</td>
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<td>PR: MCB 3030C. Survey of bacterial classification; detailed examinations of bacteria important to man in agriculture, in industry and as pathogens. Lec.-lab.</td>
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<tr>
<td>MCB 4486</td>
<td>EXPERIMENTAL MICROBIOLOGY</td>
<td>(2)</td>
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<td></td>
<td>PR: MCB 4505C and PCB 4233. This course is designed to develop practical laboratory skills and the concepts of experimental analysis in virology, and microbial genetics for microbiology students.</td>
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<tr>
<td>MCB 4505C</td>
<td>VIROLOGY</td>
<td>(3)</td>
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<td>PR: MCB 3030C. The biology of viruses associated with plants, animals, and bacteria will be considered; the nature of viruses, mechanisms of viral pathogens, and interactions with host cells.</td>
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**Bot 4223C PLANT ANATOMY**

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<tr>
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<tr>
<td>BOT 3373</td>
<td>PLANT ANATOMY</td>
<td>(3)</td>
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<td></td>
<td>PR: BOT 3373. Comparative studies of tissue and organ systems of fossil and present-day vascular plants. Functional and phylogenetic aspects stressed. Lec.-lab. (Fall semester, even years).</td>
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**Bot 4434C MYCOLOGY**

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<tr>
<td>BOT 3373</td>
<td>MYCOLOGY</td>
<td>(3)</td>
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<tr>
<td></td>
<td>PR: BOT 3373 or MCB 3030. A survey of the fungi with emphasis on their taxonomy, morphology, physiology and economic importance. Lec.-lab. (Summer).</td>
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**Bot 4503 PLANT PHYSIOLOGY**

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<tr>
<td>BOT 3373</td>
<td>PLANT PHYSIOLOGY</td>
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<td>PR: PCB 3023C. Fundamental activities of plants; absorption, translocation, transpiration, metabolism, growth, and related phenomena. Lec.-lab.</td>
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**Bot 4713C PLANT TAXONOMY**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>BOT 3373</td>
<td>PLANT TAXONOMY</td>
<td>(4)</td>
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<tr>
<td></td>
<td>PR: BOT 3373. Identification and classification of the more interesting vascular plants of Florida; angiosperm evolution; principles of taxonomy. Conducted largely in the field. Lec.-lab. (Fall semester, odd years).</td>
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**Bot 4850 MEDICAL BOTANY**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>BOT 3373</td>
<td>MEDICAL BOTANY</td>
<td>(3)</td>
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<tr>
<td></td>
<td>PR: BSC 2010, BSC 2011, CHM 2045, CHM 2046. Study of agents that are produced by plants and that are toxic or psychoactive in human beings or are useful as remedies.</td>
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**Bot 4933 SEMINAR IN BOTANY**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>BOT 3373</td>
<td>SEMINAR IN BOTANY</td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>PR: Senior or advanced junior standing. May be repeated once. (S/U only. Spring &amp; Fall semesters, irregular).</td>
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</table>

**Bot 5156 TAXONY OF FLORIDA VASCULAR PLANTS**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>BOT 3373</td>
<td>TAXONY OF FLORIDA VASCULAR PLANTS</td>
<td>(3)</td>
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<tr>
<td></td>
<td>PR: PCB 3143C OR BOT 4713C or Cl. Identification of native and naturalized vascular plants of Florida; species composition of major plant communities. Field trips emphasized. Lec.-lab.</td>
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**Bot 5185C MARINE BOTANY**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>BOT 3373</td>
<td>MARINE BOTANY</td>
<td>(3)</td>
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<tr>
<td></td>
<td>PR: BOT 3373, PCB 4043C. A field course in marine plants with emphasis on ecology and functional morphology. Field work will stress the ecological aspects of plants in a subtropical marine environment in Florida. Lec.-lab.</td>
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**Bot 5605 PLANT ECOLOGY**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>BOT 3373</td>
<td>PLANT ECOLOGY</td>
<td>(3)</td>
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**Bot 5725C EVOLUTION OF FLOWERING PLANTS**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>BOT 3373</td>
<td>EVOLUTION OF FLOWERING PLANTS</td>
<td>(3)</td>
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<tr>
<td></td>
<td>PR: BOT 4713C. A phylogenetic study of Angiosperms; relationship of the principal orders and families, problems of nomenclature, identification of specimens, comparisons of recent systems of classification, dissection of representative flower types. Field trips and lab work. Lec.-lab. (Spring semester, even years).</td>
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**Bot 5938 SELECTED TOPICS IN BOTANY**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>BOT 3373</td>
<td>SELECTED TOPICS IN BOTANY</td>
<td>(1-3)</td>
</tr>
<tr>
<td></td>
<td>Each topic is a directed study under supervision of a faculty member.</td>
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</table>
MCB 4934 Seminar in Microbiology (1) PR: MCB 3030C. A comprehensive survey of pathogenic microbes responsible for disease in man and other animals and the impact of these infectious agents on the public health. These pathogens will be studied with respect to their morphology, cultivation, mechanisms of pathogenicity, laboratory diagnosis, and epidemiology.

MCB 5606 Symboiology (3) PR: A course in microbiology, cell biology or biochemistry and advanced standing. Consideration of mutualistic and parasitic symbioses between microbes and various animal, plant and micro-biotic hosts from cellular, biochemical, evolutionary and ecological perspectives.

MCB 5815C Medical Mycology (3) PR: MCB 3030C. A survey of the yeasts, molds, and actinomycetes most likely to be encountered by the bacteriologists, with special emphasis on the forms pathogenic for man.

MCB 5938 Selected Topics in Microbiology (1-3) Each topic is a course in directed study under supervision of a faculty member.

Zoology

APB 3190 Human Anatomy and Physiology (5) PR: BSC 2010C and BSC 2011C. Lectures and discussions on the structure and function of the human body. For non-majors. May be taken by majors for both free elective by S/U only.

ENY 4004 Introduction to Entomology (3) PR: ZOO 3203 OR ZOO 3823C. An introduction to general aspects of insect morphology, development, and classification. The identification of local forms will be emphasized. Lec.-lab.

ENY 8505 Aquatic Entomology (3) PR: ENY 4004. Taxonomy, development, and ecology of aquatic insects with emphasis on local forms. Lec.-lab.

PCB 4194C Histology (4) PR: BSC 2010C, BSC 2011C. Comparative approach to the study of tissues and the relation of their structure and function. Lec.-lab.

PCB 4743C Animal Physiology (4) PR: PCB 3023C. Advanced presentation of mechanisms employed by animals to interact with their environment and to maintain their organization. Lec.-lab.

PCB 5306C Limnology (4) PR: CI. An introduction to the physical, chemical, and biological nature of fresh-water environments. Lec.-lab.

PCB 6335C Biogeography (3) PR: One year major's Biology. Principles and general patterns of terrestrial and marine animal and plant distributions.

ZOO 3203C Invertebrate Zoology (4) PR: BSC 2010C, BSC 2011C. An introduction to the major invertebrate groups, with emphasis on local forms. Field work will be required. Lec.-lab.

ZOO 3715C Comparative Vertebrate Anatomy (4) PR: BSC 2010C, BSC 2011C. Anatomy of selected vertebrate types emphasizing evolutionary trends. (Spring Sem.)

ZOO 4503C Animal Social Behavior (3) PR: BSC 2010C, BSC 2011C, or senior standing. An introduction to comparative animal behavior (Ethology), with emphasis on communication, social use of space, and behavioral evolution.


ZOO 5235C Parasitology (4) PR: ZOO 3203C. Fundamentals of animal parasitology and parasitism, the biology of selected animal parasites, including those of major importance to man. Lec.-lab.

ZOO 5425C Herpetology (4) PR: ZOO 3715C, CI. Major aspects of amphibian and reptilian biology emphasizing fossil history, evolutionary morphology, sensory physiology, life history and reproductive behavior. Lec.-lab. Field trip.


ZOO 5475C Ornithology (4) PR: Senior standing in Biology. The biology of birds. Field trips emphasize local avifauna. Lec.-lab.


Chemistry

BCH 3023 Introductory Biochemistry (3) PR: CHM 3200 or CHM 3211 and BSC 2010C. Introduction to the chemistry and intermediary metabolism of biologically important substances. Lec.

BCH 3023L Basic Biochemistry Laboratory (2) CR: BCH 3023. Practical work in determination and characterization of important biomolecules. Lec.-lab.

BCH 4034 Advanced Biochemistry (3) PR: BCH 3023. An advanced undergraduate course emphasizing such topics as metabolic regulation, DNA and RNA structure and function, receptors, channels, antibodies, and contraction.

BCH 5045 Biochemistry Core Course (3) PR: Either CHM 3211, CHM 3211L, and CHM 3400 or CHM 4410 or graduate standing. A one-semester survey course in biochemistry for graduate students in chemistry, biology, and other appropriate fields and for particularly well-qualified undergraduates. Lec.

CHM 2020 Current Issues in Chemistry (3) A survey of the important current issues in which chemistry affects our lives; e.g., environment, drugs, cancer, warfare, etc. No credit for chemistry majors.

CHM 2031 Chemistry for Today (3) A one semester terminal course designed to survey some of the important concepts and technologies of modern chemistry. No credit for science majors.

CHM 2030 Introduction to General, Organic and Biochemistry I (3) First half of a two-semester sequence. Fundamental concepts of general, organic, and biological chemistry. No credit for science majors.

CHM 2031 Introduction to General, Organic and Biochemistry II (3) PR: CHM 2030. Second half of general, biological and organic chemistry. No credit for science majors.

CHM 2040 Introductory General Chemistry (3) PR: High school chemistry and two years of high school mathematics including algebra are recommended. An introduction to the principles and applications of modern chemistry including the properties of matter, quantitative relations in chemical reactions, technological aspects and societal impact.

CHM 2041 General Chemistry I (3) PR: Satisfactory score on placement exam; or, completion of CHM 2040 with grade of C or better. Principles and applications of chemistry including properties of substances and reactions, thermodynamics, atomic-molecular structure and bonding, periodic properties of elements and compounds.

CHM 2045L General Chemistry I Laboratory (1) CR: CHM 2041. Laboratory portion of General Chemistry I. Introduction to laboratory techniques; study of properties of elements and
chemistry work. Lecture. 

Other information sources to obtain chemical analysis of data, computer data ces, study in selected cases) organic chemistry laboratory with emphasis on modem techniques and elucidation, chemical synthesis and analysis; electrochemical chemistry laboratory with emphasis on modem techniques and elucidation, chemical synthesis and analysis; electrochemical 

PR: CHM 3211. Nature, structure, elucidation, synthesis and (in selected cases) organic chemical mechanisms of biochemical in

volvement of the major classes of organic compounds found in living systems. Lec.

CHM 4410 PHYSICAL CHEMISTRY I (3) PR: CHM 3120C and MAC 3282 or MAC 3312, and PHY 3054 or PHY3049. Thermodynamics, the states of matter, solutions. Lec.

CHM 4411 PHYSICAL CHEMISTRY II (3) PR: CHM 3120C, and MAC 3282 or MAC 3312, and PHY 3054 or PHY 3049. Introduction to quantum mechanics and molecular spectroscopy. Lec.

CHM 4412 PHYSICAL CHEMISTRY III (3) PR: CHM 4410. Electrochemistry, kinetic theory of gases, chemical kinetics, surface and nuclear chemistry. Lec.

CHM 4610 ADVANCED INORGANIC CHEMISTRY (3) PR: CHM 3610 and CHM 4410 or Cl. An advanced descriptive and theoretical treatment of inorganic compounds. Lec.

CHM 4905 INDEPENDENT STUDY (1-3) PR: Cl. Specialized independent study determined by the student's needs and interests. The written contract required by the College of Arts and Sciences specifies the regulations governing independent study. May be repeated. (S/U only)

CHM 4932 SELECTED TOPICS IN CHEMISTRY (1-3) PR: Cl. The course content will depend on the interest of faculty members and student demand.

CHM 4970 UNDERGRADUATE RESEARCH (1-3) PR: Cl. (S/U only)

CHM 5225 INTERMEDIATE ORGANIC CHEMISTRY (3) PR: CHM 3211, CHM 3211L, or equivalent. This course will extend organic chemistry beyond the undergraduate level and will emphasize concepts of structure and reaction mechanisms.

CHM 5226 INTERMEDIATE ORGANIC CHEMISTRY II (3) PR: CHM 5225 or Cl. An introduction to synthetic organic chemistry for graduate students and advanced undergraduates. Lec. Semester II.

CHM 5425 APPLICATIONS IN PHYSICAL CHEMISTRY (3) PR: CHM 4411, CHM 4412 or equivalent. Applications of chemical theory to chemical systems.

CHM 5452 POLYMER CHEMISTRY (3) PR: Either CHM 3211, CHM 3211L, and CHM 3400 or CHM 4410 or graduate standing. Fundamentals of polymer synthesis, structure, properties, and characterization.

CHM 5621 PRINCIPLES OF INORGANIC CHEMISTRY (3) PR: CHM 4411 or Cl. Chemical forces, reactivity, periodicity, and literature in inorganic chemistry; basic core course. Lec.

CHM 5931 SPECIAL TOPICS IN CHEMISTRY (1) PR: Cl. The following courses are representative of those that are taught under this title: Natural Products, Stereochemistry, Reactive Intermediates, Photochemistry, Instrumental Electronics, Advanced Lab Techniques, Heterocyclic Chemistry, etc.

CHS 4100C NUCLEAR CHEMISTRY (3) PR: CHM 3120C. Theory and application of natural and induced radioactivity. Emphasis on the production, properties, measurement, and uses of radioactive tracers. Lec.-lab.

CHS 4200 INDUSTRIAL CHEMISTRY (3) PR:CHM 3211 or Cl. The general composition and properties of products in the petroleum, rubber, plastics, fiber, and detergent industries will be examined. Quality requirements imposed by product end use and new product development will be emphasized.

CHS 4300 FUNDAMENTALS OF CLINICAL CHEMISTRY (3) PR: BCH 3033. Theoretical and practical aspects of the analysis of various body fluids, with emphasis on the medical significance. Clinical chemistry menus must take CHS 4301L concurrently. Lec.

CHS 4301L CLINICAL LABORATORY (2) PR: BCH 3033 and Cl, CHM 3210C. Laboratory experience in some of the most important clinical determinations. CHS 4300 must be taken concurrently. Lec.-lab.

CHS 4302 CLINICAL CHEMISTRY PRACTICE (2-12) PR: Cl. Laboratory practice in clinical chemistry laboratories in the Tampa Bay area. (S.U only)

CHS 4310C INSTRUMENTAL ANALYSIS (4) PR: CHM 4412 or Cl. Theory and practice of instrumental methods
<table>
<thead>
<tr>
<th>CLASSICS</th>
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<tbody>
<tr>
<td>CLA 4103 GREEK CIVILIZATION - 6A</td>
<td>(3)</td>
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<tr>
<td>Study of Greek Civilization from its beginning to the Roman period, with emphasis on social customs, political institutions, and daily life.</td>
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<tr>
<td>CLA 4123 ROMAN CIVILIZATION - 6A</td>
<td>(3)</td>
</tr>
<tr>
<td>Study of Ancient Roman Civilization with emphasis on social customs, political institutions, and daily life.</td>
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**Courses in Translation**

| CLT 3040 CLASSICAL WORD ROOTS IN SCIENCE    | (3)     |
| A course in the Greek and Latin word elements used in science and technology. |         |

**GREEK**

| GRE 1120 BEGINNING CLASSICAL GREEK I         | (4)     |
| An introductory course in classical Greek grammar with appropriate readings. |         |

| GRE 1121 BEGINNING CLASSICAL GREEK II        | (4)     |
| PR: GRE 1120 or equivalent. An introductory course in classical Greek grammar with appropriate readings. |         |

| GRK 3120 BEGINNING MODERN GREEK I            | (4)     |
| An intensive study of basic skills; pronunciation, listening comprehension, speaking and some composition. |         |

| GRK 3121 BEGINNING MODERN GREEK II           | (4)     |
| PR: GRK 3120 or its equivalent. A continuation of GRK 3120. |         |

| GRW 4905 DIRECTED READING                    | (1-4)   |
| Departmental approval required.              |         |

| GRW 5905 DIRECTED READING                    | (1-4)   |
| Departmental approval required.              |         |

**LATIN**

| LAT 1120 BEGINNING LATIN I                   | (4)     |
| An introductory course in Latin grammar with appropriate readings. |         |

| LAT 1121 BEGINNING LATIN II                  | (4)     |
| PR: LAT 1120 or equivalent. An introductory course in Latin grammar with appropriate readings. |         |

| LNW 4654 HORACE                              | (4)     |
| PR: Basic knowledge of Latin. Readings in the epistles of Horace. |         |

| LNW 4650 VERGIL                              | (4)     |
| PR: LAT 1121 or equivalent. Readings in Vergil's Aeneid. |         |

| LNW 4670 OVID                                 | (4)     |
| PR: LAT 1121 or equivalent. Readings in Ovid's Metamorphoses. |         |

**COMMUNICATION**

| COM 3120 INTRODUCTION TO COMMUNICATION THEORY IN ORGANIZATIONS | (3)     |
| A study of communication theory related to interview situations with emphasis on the employment interview, appraisal interview, and persuasive interview. Students must sign up for a one-hour lab and the mass lecture. |         |

| COM 3122 INTERVIEW COMMUNICATION              | (3)     |
| Interview laboratory for practice and individual consultation. Students must take this course in conjunction with the mass lecture Study 3122. Open to majors and non-majors. Not repeatable. |         |

| COM 4942 COMMUNICATION INTERN SEMINAR         | (3)     |
| Communication major, minimum GPA 3.0, 75 hours completed, 15 hours of core requirements and 9 elective hours completed, and CI. 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. |         |

| COM 5123 COMMUNICATION ASSESSMENT IN ORGANIZATIONS | (3)     |
| For undergraduates, COM 3120 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. |         |

| ORI 3000 INTRODUCTION TO COMMUNICATION AS PERFORMANCE | (3)     |
| Designed to develop proficiency in the understanding and oral communication of literary and other written materials. |         |
ORI 3950 COMMUNICATION AS PERFORMANCE LAB (1-3)  
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 PERFORMANCE 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 PERFOR MANCE OF DRAMA (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 4310 GROUP PERFORMANCE OF LITERATURE (3)  
PR: ORI 3000 or CI. Designed to introduce the student to and give experience in various forms of group approaches to performance.

ORI 5145 PERFORMANCE OF DRAMA II (3)  
PR: ORI 4140. A study of selected pre-modern dramas with special emphasis on problems of interpretation for oral performance.

ORI 5215 PERFORMANCE 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.

SPC 2023 FUNDAMENTALS OF HUMAN COMMUNICATION (3)  
The nature and basic principles of human communication; emphasis on improving speaking and listening skills common to all forms of oral communication through a variety of experience in public discussion.

SPC 2025 SPEECH IMPROVEMENT AND PHONETICS (3)  
Designed 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 3059 SPEECH IMPROVEMENT AND PHONETICS II (3)  
PR: SPC 2050 or CI. A continuation of SPC 2050. 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 communication; communication settings; descriptive and predictive models of communication; 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: Junior standing or CI. A study of interpersonal communication in informally structured settings with emphasis on the understanding, description, and analysis of human communication.

SPC 3441 GROUP COMMUNICATION (3)  
PR: Junior standing or CI. A survey of theory and 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 ADVANCED 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 3653 RHETORIC OF CONFRONTATION (3)  
PR: Junior standing or CI. The study of rhetorical strategies and tactics of agitation and control in confrontation situations.

SPC 3653 POPULAR FORMS OF PUBLIC COMMUNICATION (3)  
PR: Junior standing or CI. Analysis of public communication with emphasis on various presentational forms.

SPC 3681 RHETORICAL ANALYSIS (3)  
This course introduces students to fundamentals of message analysis. Study examines persuasive strategies and language in oral and written discourse (not repeatable).

SPC 4632 RHETORIC OF SOCIAL CHANGE (3)  
PR: SPC 3230 or SPC 3681. This course examines how social change is symbolized and motivated in the rhetorics of institutions, campaigns, social movements and individuals. Open to majors and non-majors.

SPC 4653 RHETORICAL ANALYSIS OF MASS MEDIA (3)  
PR: SPC 3230 or SPC 3681. An introduction to the criticism of media forms and effects. Contemporary perspectives of the aesthetic and persuasive dimensions of mass media are examined. Students will engage in critical study of media artifacts.

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, minimum GPA 2.5, 15 hours of core requirements and 9 elective hours completed, and CI. Maximum 6 hours.

SPC 4905 UNDERGRADUATE RESEARCH (1-3)  
PR: Senior standing, minimum GPA 2.5, 15 hours of core requirements and 9 elective hours completed, and CI. Maximum 6 hours. Individual investigations with faculty supervision.

SPC 4930 SELECTED TOPICS (1-3)  
PR: Senior standing, minimum GPA 2.5, 15 hours of core requirements and 9 elective hours completed, and CI. May be repeated.

SPC 4932 SENIOR SEMINAR IN COMMUNICATION (3)  
PR: Senior standing, minimum GPA 3.0, 15 hours of core requirements and 9 elective hours completed, and CI. Communication major. Exploration of selected topics of current significance to the several areas of communication through group discussion and research.

SPC 5335 NONVERBAL COMMUNICATION (3)  
PR: Senior standing and CI. A survey of scientific and pragmatic research in nonverbal behavior relating to communication.

SPC 5912 RESEARCH (1-4)  
PR: Senior or graduate standing and CI.

SPC 5933 SELECTED TOPICS (1-4)  
PR: Senior or graduate standing. Undergraduates must have minimum GPA 3.0, 15 hours of core requirements and 9 elective hours completed, and CI.

COMMUNICATION SCIENCES AND DISORDERS

SPA 3002 INTRODUCTION TO DISORDERS OF SPEECH AND LANGUAGE (3)  
The scope of speech-language pathology as a profession and a field of study. An introduction to speech and language disorders, etiologies, major treatment approaches, and research findings.

SPA 3011 INTRODUCTION TO SPEECH SCIENCE (3)  
Concentrated study of the acoustic, physiological and perceptual aspects of sound as related to normal and pathological speech communication. Introduction to instrumentation and measurement procedures.

SPA 3030 INTRODUCTION TO HEARING SCIENCE (3)  
PR: CI. Introduction to the field of hearing including: physics of sound, auditory anatomy and physiology, and psychophysics of hearing.

SPA 3101 ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISM (3)  
The neurological and anatomical basis of communication disorders. Comparisons of normal and pathological organic structures and their functional dynamics.

SPA 3112 APPLIED PHONETICS IN COMMUNICATION DISORDERS (2)  
PR: CI. Introduction to phonetic analysis of normal and disordered
speech, including extensive training in transcription using the International Phonetic Alphabet.

**SPA 3310 INTRODUCTION TO DISORDERS OF HEARING**

PR: SPA 3030. The etiology, pathology, and management of disorders of the outer ear, middle ear, and inner ear; retrocochlear, and central auditory systems.

**SPA 3380 BASIC AMERICAN SIGN LANGUAGE**

Introduction to American Sign Language (ASL) as used in the deaf community. General discussion of ASL structure and introduction to various manual communication systems and philosophies. Emphasis on building a basic vocabulary. One hour laboratory course (SPA 3380L) to be taken concurrently. Open to all majors.

**SPA 3380L BASIC AMERICAN SIGN LANGUAGE LABORATORY**

A laboratory designed to offer additional practice in sign language by means of videotapes. Concurrent enrollment at each level of sign language is required. There are no prerequisites. May be repeated up to 2 credit hours.

**SPA 4000 COMMUNICATION DISORDERS IN THE PUBLIC SCHOOLS**

PR: CI. An examination of the speech, language and hearing problems affecting school-age children and the classroom teacher's role in the detection, prevention and amelioration of communication disorders. (Non-major course only).

**SPA 4050 INTRODUCTION TO THE CLINICAL PROCESS**

Observation and participation in speech-language pathology and audiology practicum in the University clinical laboratory.

**SPA 4201 PHONOLOGICAL DEVELOPMENT AND DISORDERS**

PR: CI. An examination of normal and deviant articulatory acquisition and behavior. Presentation of major theoretical orientations and the therapeutic principles based upon them.

**SPA 4210 VOCAL DISORDERS**

PR: CI. A comprehensive study of the medical and physical aspects of voice disorders. Primary emphasis is on therapeutic management.

**SPA 4222 FLUENCY DISORDERS**

PR: CI. A comprehensive study of disfluent speech behavior. Differential diagnosis, principles of therapeutic intervention, procedures for children and adults will be studied. Major theories and models of the development and origin of stuttering are also presented.

**SPA 4331 FUNDAMENTALS OF FINGERSPELLING**

PR: CI. A concentrated study of technique in fingerspelling emphasizing clarity and rhythm in expression as well as receptive understanding.

**SPA 4332 STRUCTURE OF SIGN LANGUAGE**

PR: CI. Semiotic and linguistic consideration of American Sign Language (ASL). Includes aspects of phonology, syntax, semantics, and discourse in ASL.

**SPA 4335 SIGN LANGUAGE CODES**

PR: CI. A review of the sign systems (SEE I, SEE II, L.O.V.E., and Signed English) used to code messages through the use of sign. The student will have the opportunity to practice one of the sign systems.

**SPA 4363 NATURE AND NEEDS OF HEARING IMPAIRED**

A study of the effects of auditory disorders upon the organization and expression of behavioral patterns as they relate to motivation, adjustment and personality.

**SPA 4382 INTERMEDIATE AMERICAN SIGN LANGUAGE**

PR: SPA 3380, SPA 3380L, and CI. A continuation of the basic course which expands the student's signing skills and introduces American Sign Language (ASL) idioms. Provides a greater opportunity for skill development in ASL structure and idiomatic usage. One hour laboratory course (SPA 4382L) to be taken concurrently.

**SPA 4382L INTERMEDIATE AMERICAN SIGN LANGUAGE LABORATORY**

PR: SPA 3380 and SPA 3380L. A laboratory designed to offer additional practice in sign language by means of videotapes. Concurrent enrollment in SPA 4382 of sign language. May be repeated up to 2 credit hours.

**SPA 4383 ADVANCED AMERICAN SIGN LANGUAGE**

PR: SPA 4382, SPA 4382L, and CI. A continuation of the study of American Sign Language (ASL) at the advanced skill level. Added emphasis on idioms, body language, and facial expression as an integral part of ASL. A one hour laboratory course (SPA 4383L) is to be taken concurrently. Open to all majors.

**SPA 4383L ADVANCED AMERICAN SIGN LANGUAGE LABORATORY**

PR: CI. An advanced laboratory course designed to offer students added practice with the material presented in the ASL coursework through video and audio tapes. To be taken concurrently with Advanced American Sign Language (SPA 4383).

**SPA 4562 COUNSELING OF COMMUNICATIVELY HANDICAPPED AND FAMILY**

Discussion of role of counseling in the treatment of communication disorders. Based on exploration of theoretical constructs, this course demonstrates application of therapeutic methodologies to reduction of communication handicaps.

**SPA 4930 SELECTED TOPICS**

PR: CI. Intensive study of topics in Speech-Language Pathology, Audiology, and/or Aural Rehabilitation conducted under the supervision of a faculty member. May be repeated for a total of 9 credit hours.

**SPA 5132 AUDIOLOGY INSTRUMENTATION**

PR: CI. Calibration, usage and specific applications of specialized instruments available in dealing with the identification and measurement of hearing disorders.

**SPA 5150 ADVANCED SPEECH SCIENCE**

PR: SPA 3011 or equivalent. Must be taken with SPA 5150L: Speech Science Laboratory. Advanced study of the acoustics, production and perception of normal and disordered speech.

**SPA 5150L SPEECH SCIENCE INSTRUMENTATION**

PR: CI or SPA 3011 or equivalent. This course offers experience in the use of speech recording, monitoring and analyzing equipment for the evaluation of normal and disordered voice and speech characteristics.

**SPA 5303 ADVANCED HEARING SCIENCE**

The study of the physiological acoustics of the auditory periphery; the neuroanatomy and electrophysiology of the central auditory system; and psychoacoustic principles as they relate to clinical audiologic measurement paradigms.

**SPA 5312 PERIPHERAL AND CENTRAL AUDITORY TESTS**

PR: CI. The study of behavioral and electrophysiologic clinical tests designed to assess the function of the peripheral and the central auditory system. Tests which incorporate nonspeech stimuli and those which utilize speech stimuli will be included.

**SPA 5320 AURAL REHABILITATION: ADULTS**

This course is designed to provide information about and strategies for aural rehabilitation intervention with hearing-impaired adults. Topics covered include: speechreading, auditory training, hearing and assistive listening devices.

**SPA 5401 LANGUAGE LEARNING IN THE SCHOOL-AGE YEARS**

PR: Psych Lang Develop or equiv; PI. Metalinguistic and metacognitive development are linked to the interactional demands of classroom and clinical discourse; observational tools are applied to evaluation and intervention planning.

**SPA 5403 COMMUNICATION DISORDERS: LANGUAGE**

PR: CI. Examination of research and clinical literature presenting major theoretical orientations pertaining to the etiology, evaluations, and treatment of those factors that hinder or interrupt normal language acquisition or function.

**SPA 5506 SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY PRACTICUM**

PR: Admission to program; CI. The evaluation, interpretation and reporting of diagnostic tools and their results in the assessment of speech and language disorders.

**SPA 5592 DIAGNOSTIC PRINCIPLES AND PRACTICES**

PR: Admission to program; CI. The evaluation, interpretation and reporting of diagnostic tools and their results in the assessment of speech and language disorders.
CRIMINOLOGY

CCJ 3003 CRIME AND JUSTICE IN AMERICA (4)
A non-technical survey of the nature of crime in the United States and the ways in which our society seeks to deal with criminal offenders and victims of crime. May be taken by both majors and non-majors for credit, subject to departmental approval for declared majors.

CCJ 3020 SURVEY OF THE CRIMINAL JUSTICE SYSTEM (3)
PR: PSY 2012, SOC 2000, or equivalent, or Cl. An introduction to the structure and operation of law enforcement, prosecution, the courts, and corrections. Also includes a brief coverage of major reported crimes.

CCJ 3210 CRIMINAL LAW I (3)
PR: CCJ 3020, POS 2041 or Cl. Examines the historical basis of the American criminal law system, the substantive elements of the crime, and court procedures.

CCJ 3610 THEORIES OF CRIMINAL BEHAVIOR (3)
PR: CCJ 3020. Provides a basic understanding of the complex factors related to crime, with concentration on principal theoretical approaches to the explanation of crime.

CCJ 3621 PATTERNS OF CRIMINAL BEHAVIOR (3)
Reviews the nature and extent of the crime problem. The course will concentrate on major patterns of offender behavior including crimes against the person, property crimes, violent crimes, economic/white collar offenses, syndicated (organized) crimes, consensual crimes, female crime, political crime, and will examine criminal career data.

CCJ 3701 RESEARCH METHODS IN CRIMINAL JUSTICE I (3)
PR: Junior standing and CCJ 3020 or Cl. Introduces the student to some of the fundamentals of knowledge-generating processes in criminal justice.

CCJ 4110 AMERICAN LAW ENFORCEMENT SYSTEMS (3)
Provides a comprehensive examination of the American law enforcement system at the federal, state, and local levels and an assessment of career opportunities within the community.

CCJ 4230 CRIMINAL LAW II (3)
PR: CCJ 3280. Emphasizes the Constitutional issues and rules that are applied and enforced by the courts while processing criminal cases.

CCJ 4331 ALTERNATIVES TO INCARCERATION (3)
PR: Junior standing plus CCJ 3280 or Cl. This course explores a variety of alternatives to imprisoning the offender, including probation, parole, diversion, and other community-based intervention and treatment approaches.

CCJ 4340 INTERVENTION TECHNIQUES AND STRATEGIES (3)
PR: Senior standing or Cl. Introduces the student to theories and methods underlying treatment modalities currently employed in corrections.

CCJ 4350 AMERICAN CORRECTIONAL SYSTEMS (3)
PR: Junior standing plus CCJ 3280 or Cl. Analysis of the different treatment philosophies and techniques currently in use in the field, with special attention to experimental and demonstration programs.

CCJ 4450 CRIMINAL JUSTICE ADMINISTRATION (3)
This course is designed to provide an in-depth examination of both the practical and theoretical aspects of the administration of criminal justice agencies. The major focus will be on law enforcement and correctional agencies.

CCJ 4501 JUVENILE JUSTICE SYSTEM (3)
PR: CCJ 3020 or Cl. Provides coverage of the juvenile and family courts, their clientele, and the complex of human services agencies and facilities that contribute to efforts at juvenile correctional intervention.

CCJ 4604 ABNORMAL BEHAVIOR AND CRIMINAlITY (3)
PR: CCJ 3280, or Cl. A systematic introduction to the relationship between mental illness and criminality, with focus on psychiatric labeling of deviant behavior and its implications for the handling of the criminal offender.

CCJ 4700 RESEARCH METHODS IN CRIMINAL JUSTICE II (3)
PR: Junior standing or Cl. Beginning with the scientific method, the tools commonly used to analyze criminal justice data will be empha-
A study of the major trends and influences in American prose fiction from 1900 to the present. Includes works by such writers as Hemingway, London, Wharton, Fitzgerald, Faulkner, West, Mailer, Bellow, Ellison, Donleavy, Updike, Vonnegut, and others.

AML 4261 LITERATURE OF THE SOUTH

A study of the major writers of the "Southern Renaissance," including writers such as Faulkner, Wolfe, Caldwell, Hallman, McCullers, O'Connor, Warren, Styron, Tate, Davidson, and Dickey.

AML 4300 SELECTED AMERICAN AUTHORS

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 with credit for different topics.

CRW 2100 NARRATION AND DESCRIPTION -6A

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 3111 FORM AND TECHNIQUE OF POETRY -3

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 3112 FICTION I -6A

PR: CRW 3111. An introduction to fiction writing, beginning with a practical study of the various elements of fiction and proceeding through the many processes of revision to arrive at a completed work of art.

CRW 3121 FICTION II -6A

PR: CRW 3111, CRW 3112. A fiction workshop which provides individual and peer guidance and direction for student writing and which also attempts to encourage the development of critical skills.

CRW 3311 FORM AND TECHNIQUE OF POETRY

An examination of the techniques employed in fixed forms from the couplet through the sonnet to such various forms as the Rondel, ballad, villanelle, sestina, etc. Principles in the narrative, dramatic, and lyric modes are also explored.

CRW 3312 POETRY I

PR: CRW 3311. An introduction to poetry writing utilizing writing exercises employing poetic language and devices; the exercises progress to the development of both rhymed and unrhymed metrical and non-metrical forms.

CRW 3321 POETRY II

PR: CRW 3311, CRW 3312. A poetry workshop which provides individual and peer guidance and direction for the student's writing and which also attempts to encourage the development of critical skills.

CRW 4120 FICTION III

PR: CRW 3111, CRW 3112, CRW 3121. An advanced fiction workshop wherein works may be carried over from CRW 3121 or longer forms such as the novel may be begun. May be taken twice for credit.

CRW 4320 POETRY III

PR: CRW 3311, CRW 3312, CRW 3321. An advanced poetry workshop wherein students are expected to create works exhibiting a firm knowledge of the principles explored in the preceding courses. May be taken twice for credit.

CRW 4930 SELECTED TOPICS IN CREATIVE WRITING

PR: 12 hours of CRW courses or CI. The focus of the course will be governed by student demand and instructor interest. Topics to be covered may include writing the literary essay, writing in mixed genres, and utilizing popular conventions in serious works. May be repeated up to 8 credit hours.

ENC 1101, 1102 FRESHMAN ENGLISH -6A

Instruction and practice in the skills of writing and reading. Courses must be taken in numerical sequence.

ENC 1121 FRESHMAN ENGLISH: HONORS

Honors Section of ENC 1101. Reserved for students in the University's Honors Program.

ENC 1122 FRESHMAN ENGLISH II: HONORS

PR: ENC 1121. Honors Section of ENC 1102. Reserved for students in the University's Honors Program.

ENC 3210 TECHNICAL WRITING -6A

Effective presentation of technical and semi-technical information.

ENC 3213 PROFESSIONAL WRITING -6A

Introduction to the techniques and types of professional writing, including correspondence and reports most often found in business, technical, and scientific communities.

ENC 3310 EXPOSITORY WRITING -6A

A course teaching the techniques for writing effective prose, excluding fiction, in which student essays are extensively criticized, edited, and discussed in individual sessions with the instructor.

ENC 4260 ADVANCED TECHNICAL WRITING

PR: ENC 3210, or ENC 3310, or CI. Advanced Technical Writing 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.

ENC 4311 ADVANCED COMPOSITION

PR: ENC 3310 or CI. Instruction and practice in writing effective, lucid, and compelling prose, with special emphasis on style, logical argumentation, and critical thinking.

ENC 4931 SELECTED TOPICS IN PROFESSIONAL AND TECHNICAL WRITING

PR: ENC 3213, ENC 3210, or ENC 3310 or CI. Focus of the course will be determined by student demand and instructor interest. Topics to be covered may include legal writing, the conventions of business writing, and writing for the social sciences.

ENG 3105 MODERN LITERATURE, FILM, AND THE POPULAR ARTS

A study of popular films and novels that shows us how such popular arts as the detective story, westerns, science fiction, spy stories, and musical comedy have changed. The course also explores why important changes took place, and considers how and why many serious writers and filmmakers today use techniques, ideas, and situations drawn from the popular arts.

ENG 3114 MODERN DRAMA

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

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 4060 HISTORY OF THE ENGLISH LANGUAGE

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.

ENG 4906 INDIVIDUAL RESEARCH

Directed study in special projects. Special permission of chairperson required.

ENG 4907 DIRECTED READING

Readings in special topics.

ENG 4935 HONORS SEMINAR I

PR: Admission to English Honors Program (should be taken concurrently with ENG 4936). A study of two or three major American or British writers. Students will be expected to participate in class discussion, make formal presentations, and complete a major research project.

ENG 4936 HONORS SEMINAR II

PR: Admission to English Honors Program (should be taken concurrently with ENG 4935). A study of critical theory from Aristotle to the present. Students will be expected to participate in class discussion, make formal presentations, and complete a major research project.
ENG 4970 HONORS THESIS SEMINAR (3)
PR: ENG 4935 and ENG 4936. For students writing honors theses. Class time will be devoted to exchange of research findings, instructor and peer critique of method, structure, and rhetoric of individual projects.

ENG 5067 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.

ENL 3015 BRITISH LITERATURE TO 1616 (3)
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 Jonson.

ENL 3273 BRITISH LITERATURE 1616-1780 (3)
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 3250 BRITISH LITERATURE 1780-1900 (3)
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 3273 BRITISH LITERATURE 1900-1945 (3)
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, and others.

ENL 3331 EARLY SHAKESPEARE (3)
A study of six to eight of Shakespeare's comedies, histories, and early tragedies, ending with Hamlet. Special attention to developing the student's ability to read and interpret the text.

ENL 3332 LATE SHAKESPEARE (3)
A survey of six to eight of Shakespeare's problem plays, major tragedies, and late romances. Special attention to developing the student's ability to read and interpret the text.

ENL 4122 BRITISH NOVEL THROUGH HARDY (3)
A study of an 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 (3)
A critical study of the great novels 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 (3)
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, and others.

ENL 4303 SELECTED AUTHORS (3)
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 (3)
An intensive study of The Canterbury Tales and major critical concerns.

ENL 4338 ADVANCED STUDIES IN SHAKESPEARE (3)
PR: ENL 3331 or ENL 3332, 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 (3)
Study of the poetry and major prose of John Milton, with special emphasis on Paradise Lost.

LIN 4340 TRADITIONAL ENGLISH GRAMMAR (3)
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 4503 STRUCTURE OF AMERICAN ENGLISH (3)
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 2010 INTRODUCTION TO FICTION -6A (3)
A study of the short story and novel as literary forms; not restricted to any historical period. Will not be counted toward the English major.

LIT 2021 CURRENT SHORT FICTION (3)
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 2030 INTRODUCTION TO POETRY -6A (3)
A study of the poem as literary form; not restricted to any historical period. Will not be counted toward the English major.

LIT 2040 INTRODUCTION TO DRAMA -6A (3)
A study of the major forms of drama as literature; not restricted to any historical period. Will not be counted toward the English major.

LIT 2091 CURRENT NOVELS (3)
A survey 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 (3)
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 3000 INTRODUCTION TO LITERATURE -6A (3)
The nature and significance of literature in its various forms: fiction, drama, poetry; emphasis on the techniques of reading literature for informed enjoyment. Will not be counted toward the English major.

LIT 3122 MODERN SHORT NOVEL (3)
A study of the novels from the nineteenth century to the present. Writers include: James, Dostoevsky, Camus, Stynon, Nabokov, Gardner, Roth, Vonnegut, and others.

LIT 3073 CONTEMPORARY LITERATURE (3)
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 SINCE THE RENAISSANCE -6A (3)
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 -6A (3)
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, Satre, and Camus, among others.

LIT 3144 MODERN EUROPEAN NOVEL (3)
A study of the Modern European novel in translation as it developed from the nineteenth century to the present, including such writers as Dostoevsky, Flaubert, Kafka, Hesse, Camus, and Solzhenitsyn.

LIT 3304 TWENTIETH-CENTURY BEST SELLERS (3)
A study of representative best-selling novels in twentieth century America; including such popular works as Peyton Place, Lady Chatterly'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 tastes.

LIT 3310 FANTASY AND SCIENCE FICTION (3)
A survey of fantasy and science fiction in England and America 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 (3)
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 (3)
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 (3)
Theological and philosophical ideas, allusions, and symbols in the writings of Dostoevsky, Nietzsche, Mann, Joyce, Eliot, Camus, Sartre, among others.

LIT 3451 LITERATURE AND THE OCCULT (3)
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)
A chronological sampling of the major poems written in English from the Middle Ages to the present. Recommended 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 (3)
Intensive study of the genres and varieties of fiction to ascertain the theoretical and technical problems involved in the work of fiction.

LIT 4030 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 with different topics.

REA 1105 ADVANCED READING (3)
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 2505 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.

GEOGRAPHY

GEO 3000 WORLD REGIONAL GEOGRAPHY (4)
Comparative and analytical analysis of representative regions of the world with emphasis on cultural, political, economic, and physical diversity.

GEO 3009 GENERAL GEOGRAPHY (4)
Selected topics in regional and topical geography offered as survey courses. Open to all students.

GEO 3194 REGIONAL GEOGRAPHY (4)
Variable title course to systematically study and compare special regions identified by the instructor.

GEO 3202 GEOGRAPHY OF ANGLO-AMERICA (4)

GEO 3300 GEOGRAPHY OF MIDDLE AMERICA (4)

GEO 3400 GEOGRAPHY OF LATIN AMERICA (4)

GEO 3500 GEOGRAPHY OF EUROPE (4)

GEO 3554 GEOGRAPHY OF THE USSR (4)

GEO 3600 GEOGRAPHY OF AFRICA (4)

GEO 3703 GEOGRAPHY OF ASIA (4)

GEO 3830 GEOGRAPHY OF CURRENT EVENTS (4)
Application of basic geographic principles of the analysis of contemporary events in various parts of the world.

GEO 3013 SYSTEMATIC GEOGRAPHY (4)
Principles and concepts of the discipline; maps, earth-sun relations, weather, and climate.

GEO 3014 SYSTEMATIC GEOGRAPHY (4)
PR: GEO 3013. Continuation of GEO 3013; soil, water, rocks, minerals, and landforms.

GEO 3402 HUMAN GEOGRAPHY (4)
Systematic treatment of man's activities on earth; population, settlement, agriculture, industry, trade, transportation, and political aspects are among those considered.

GEO 3901 ELEMENTS OF GEOGRAPHY (1)
Independent study; various topics in physical and cultural geography. (S/U only.)

GEO 3931C WEATHER AND MAN (4)
The interrelationship between the atmospheric environment and man.

GEO 4040C MAP INTERPRETATION (4)
PR: GEO 3014. Analysis and synthesis of various types of maps and map projections.

GEO 4100C CARTOGRAPHY (4)
PR: GEO 3014. Map compilation and graphic presentation.

GEO 4114C GEOGRAPHICAL TECHNIQUES AND METHODOLOGY (4)
PR: GEO 3014. Selected topics in various geographic techniques and methodologies and their application.

GEO 4124C AIR PHOTO INTERPRETATION (4)
PR: GEO 3014. Detection, identification, and analysis of objects on the earth's surface. Techniques other than photographic are also considered.

GEO 4164C QUANTITATIVE METHODS (4)
PR: GEO 3014. Statistical analysis in geographic research.

GEO 4201C PHYSICAL GEOGRAPHY (4)
PR: GEO 3014 Intensive study of a topic selected from physical geography.

GEO 4210 GEOMORPHOLOGY (4)

GEO 4280C HYDROLOGY (4)
PR: GEO 3014. Hydrologic cycle; precipitation, evapotranspiration, water budget, streamflow, and probability analysis.

GEO 4340 MAN AND NATURAL HAZARDS (4)
The impact of hurricanes, tornadoes, earthquakes, sink holes, tidal waves, fire, freezes, and droughts on people; attempts to overcome or avoid these hazards.

GEO 4372 CONSERVATION (4)
The distribution, exploitation, and conservation of physical and human resources, ecology.

GEO 4390 WATER RESOURCES (4)
A general overview of the hydrologic cycle and the impact of cultural development of its various components. May also include a survey of regional water problems.

GEO 4421 CULTURAL GEOGRAPHY (4)
PR: GEO 3014. The interrelationships of culture and nature, from prehistoric times to the present.

GEO 4440 POPULATION GEOGRAPHY (4)
An analysis of contemporary patterns in world and regional distributions of people and geographical factors underlying these patterns and their changes.

GEO 4440H HISTORICAL GEOGRAPHY (4)
Survey of evolving landscapes through time; analysis is made by means of systematic and regional methods in order to reconstruct the changing culture-nature equation.

GEO 4470 POLITICAL GEOGRAPHY (4)
PR: GEO 3014. The geographic factors underlying political decisions and influencing their outcome; the geographic consequences of these decisions; geopolitics.

GEO 4502 ECONOMIC GEOGRAPHY (4)
PR: GEO 3014. The spatial organization of economic production, consumption, and exchange systems.
GEO 4602 URBAN GEOGRAPHY (4)
PR: GEO 3014. Spatial analysis of urban areas; growth, location, spacing, and size. Development, site, situation, internal structure, and hinterland are considered.

GEO 4700 TRANSPORTATION GEOGRAPHY (4)
PR: GEO 3014. Interrelationships between freight and passenger transportation and land use, in terms of site, traffic generation, and circulation.

GEO 4900 DIRECTED READING (1-4)
PR: 20 hours in geography and CC prior to registration. May be repeated.

GEO 4910 INDIVIDUAL RESEARCH (1-4)
PR: 20 hours in geography and CC prior to registration. May be repeated.

GEO 5058 GEOGRAPHIC LITERATURE AND HISTORY (3)
PR: Senior or graduate standing in geography, or CI. The origins and development of the discipline as revealed through an examination of the principal written sources. Special attention paid to leading personalities and modern periodicals.

MET 4002 CLIMATOLOGY (4)
PR: GEO 3013 or CI. An introductory course which includes an examination of climatic classification systems, problem climates, and the application of climate to selected topics such as world vegetation patterns, agriculture, housing and health.

MET 4010C METEOROLOGY (4)
PR: GEO 3013 or CI. The earth's atmosphere and its processes; weather forecasting and analysis; instrumentation.

URP 4052 URBAN AND REGIONAL PLANNING (3)
The geographic foundations of the modern city, metropolitan development, and the trend toward megalopolis. Examined are the political problems of conflicting jurisdictions at the local, county, state, national, and international levels.

GEOLOGY

GLY 2010 (formerly GLY 2016) PHYSICAL GEOLOGY (4)
Study of minerals, rocks, and processes of the earth's crust. Introduction to origin and classification of earth's materials and landforms. Lec.-lab.

GLY 2100 EARTH HISTORY (4)
PR: A course in geology. Study of the physical and biological history of the earth including evolution of the major groups of organisms, continental drift, and interpretation of ancient environments. Lec.-lab.

GLY 2850 ENVIRONMENTAL GEOLOGY (3)
A first course in geology emphasizing environmental aspects of the earth's crust, such as earthquakes, depletion of the earth's resources, water supply problems, and geologic land use and planning. No credit for geology majors.

GLY 2930 SELECTED TOPICS IN GEOLOGY (1-3)
Topical courses in geology of general interest. Does not count toward the geology major.

GLY 3006 GEOLOGY OF OUR NATION'S PARKS (3)
Representative national, state, and local parks are used to illustrate fundamental concepts of geology, hydrology, and the environment. For non-science majors. No credit for geology majors.

GLY 3200 MINERALOGY (3)
PR: GLY 2010, one year of chemistry, or CI. Principles of crystal chemistry, crystallography and mineralogy with emphasis on common rock-forming minerals. Lec.-lab.

GLY 3220 OPTICAL MINERALOGY (3)
PR: GLY 2010, one year of chemistry, or CI. Principles and theory of the behavior of light within minerals and the identification of minerals using the polarizing microscope. Lec.-lab. Restricted to majors and minors in geology.

GLY 3400 STRUCTURAL GEOLOGY (4)
PR: 12 hours of geology, MAC 2132 or equivalent or CI. Study of the origin and development of structural features of the earth's crust. Applications of principles of geology, physics, and mathematics to understanding relationships of strata and interpreting structural features. Study of regional tectonics and major structural provinces. Lec.-lab.

GLY 3500 INTRODUCTION TO INVERTEBRATE PALEONTOLOGY (4)
PR: GLY 2100. BSC 2010C or equivalent strongly encouraged as background. Lectures cover principles and applications of paleontology, including biostratigraphy, taphonomy, paleoecology, and microscopic and macroevolutionary patterns and processes. Labs study the invertebrate phyla comprising the bulk of the fossil record.

GLY 3630 GEOLOGY FOR ENGINEERS (3)
PR: Junior standing in College of Engineering or CI. An examination of geologic materials and processes designed for engineering students; classification and properties of earth materials, surface processes, site investigation techniques, applications of geology to the solution of engineering problems. (No credit toward the geology major, or for those with credit for GLY 2010.)

GLY 4200 PETROLOGY (3)
PR: GLY 3200, GLY 3220, CI. The formation of igneous and metamorphic rocks in varying tectonic environments. Emphasis is placed on the identification of igneous and metamorphic rocks in hand specimens and thin sections. Lec.-lab.

GLY 4511 STRATIGRAPHY AND PETROLEUM GEOLOGY (4)
PR: GLY 4550. Emphasis on classical principles of litho- and biostratigraphy, basin analysis, geophysical well logging, origin and occurrence of petroleum. Exploration methods are emphasized. Lec.-lab.

GLY 4550 DEPOSITIONAL SYSTEMS (4)
PR: GLY 3200, GLY 3220, or concurrent registration. Study of modern sedimentary environments and their relationships to one another in order to understand environments preserved in the rock record. Physical, chemical and biological aspects of terrestrial, transitional and marine sedimentary environments will be examined in light of their eventual preservation in rocks. Laboratory experience will include textural mineralogical analysis of sediments and sedimentary rocks as well as exercises involving sequences of sedimentary strata.

GLY 4555 SEDIMENTOLOGY (4)
PR: GLY 4220, GLY 4550 or CI. Analysis of sedimentary rocks and sedimentary structures as related to their environments of deposition. Textural and mineralogical study of sediments and statistical applications to sediment analysis. Lec.-lab.-field trips.

GLY 4700 GEOMORPHOLOGY (4)
PR: Senior or advanced junior standing and CI. Origin, evolution and distribution of land forms and soils. Dynamics of the earth's surface. Lec.-lab.-field trips.

GLY 4730 MARINE GEOLOGY (3)
PR: 12 hours of geology or CI. General survey of the geology of the ocean floor from beaches to ocean trenches including sediments, processes, tectonics and history.

GLY 4750 FIELD METHODS (3)
PR: 12 hours of geology courses or CI. Fundamentals of geology in the field; compass and plane table mapping, mapping on aerial photos, reconnaissance surveys, interpretation of geologic structure. Lec.-lab.-field trips.

GLY 4791 FIELD CAMP PART I - FIELD METHODS (3)
PR: CI. Senior standing. Linked with Field Camp II. Basic field methods; use of pocket transits, techniques of field location, pace and compass traversing, techniques for lithological and structural data collection, fundamentals of geological data presentation and map making. Field camp is located in northern New Mexico. Requires camping and vigorous physical activity. Lec.-field work.

GLY 4792 FIELD CAMP PART II - FIELD GEOLOGY (3)
PR: CI. Senior standing. Linked with Field Camp I. Fundamentals of regional field geology; mapping sedimentary, metamorphic and igneous rocks on topographic base maps; interpretation of depositional environments; interpretation of deformational and metamorphic histories. Requires camping and vigorous physical activity. Lec.-field work.
GLY 4816 ECONOMIC MINERAL DEPOSITS (3)
PR: 16 hours of geology or Cl. Principles involved in the origin, occurrence, recovery, and use of mineral resources. Lec.-lab.-field trips.

GLY 4820 INTRODUCTION TO HYDROGEOLOGY (4)
PR: GLY 2010, advanced junior or senior standing, one year each physics and calculus or Cl. Ground water flow systems, ground water geology, introduction to numerical and analytical models of ground water flow. Lec.-lab.-field trips.

GLY 4905 INDEPENDENT STUDY (1-3)
PR: Cl. Specialized independent study determined by the student's needs and interests. May be repeated. (S.U only)

GLY 4915 UNDERGRADUATE RESEARCH (1-3)
PR: Senior or advanced junior standing and written permission of department prior to registration. Individual experimental investigations with faculty supervision. (S.U only)

GLY 4920 GEOLOGY COLLOQUIUM (1)
PR: Senior standing in Geology. Weekly topical lectures by faculty, graduate students and invited speakers. Required of all senior geology majors, to be repeated for a total of two credit hours. (S.U only)

GLY 4930 SELECTED TOPICS IN GEOLOGY (1-4)
Each topic is a course under the direction of a faculty member with the content depending on the interests of the students and faculty involved. All areas of geology included. Departmental permission required prior to registration.

GLY 4970 UNDERGRADUATE HONORS THESIS (3)
Open to seniors admitted to the Geology undergraduate honors program. Students will complete an independent research project under supervision of a faculty member, and present results in a senior thesis and a public presentation.

GEQ 3001 INTRODUCTION TO OCEANOGRAPHY (3)
Overview of biological, chemical, geological, and physical oceanography. Does not count as a Geology elective. (Also listed under Marine Science.)

GLY 5241 GENERAL GEOCHEMISTRY (3)
PR: One year college chemistry, GLY 4200 or Cl. Applications of basic chemical concepts are used to investigate and explain geological processes, the age and formation of the earth, and environmental conditions.

GLY 5248 ANALYTICAL TECHNIQUES IN GEOLOGY (4)
PR: One year college chemistry, GLY 4220 or Cl. Use and application of modern analytical methods including X-ray, atomic absorption, and other geochemical techniques. Interpretation and statistical analysis of data acquired. Lec.-lab.

GLY 5310 IGNEOUS AND METAMORPHIC PETROLOGY (3)
PR: GLY 4220. Systematic study of igneous and metamorphic rocks and complexes, including origin, composition, and classification. Use of the polarizing microscope for thin-section analysis will be emphasized, and other modern methods of study will be employed. Lec.-lab.

GLY 5450 PRINCIPLES OF APPLIED GEOPHYSICS (4)
PR: Senior standing, one year of college physics and calculus, or Cl. Survey of modern exploration geophysics, including gravimetric, magnetic, electric, and seismic methods as applied to resource exploration and site investigations. Lec.-lab.-field trips.

GLY 5752 GEOLOGICAL FIELD EXCURSION (2)
PR: GLY 3400, GLY 4550, and GLY 4750. Lectures and 2-3 week field excursion to study regional geology, structure and lithogenesis of geologically complex terrain. Mapping and outcrop description techniques are emphasized. Destination of trip varies. Trip requires camping and vigorous physical activity. Lec.-field trip.

GLY 5825 ADVANCED HYDROGEOLOGY (4)
PR: GLY 4820, MAC 3282 or MAC 3312 or Cl. Flow systems, analytical and numerical solutions to ground water flow problems. Emphasis on the theoretical aspects of ground water flow systems and their interaction with the geologic framework. Lec.

GLY 5890 STATISTICAL MODELS IN GEOLOGY (3)
PR: STA 3023 or equivalent or Cl. Application of statistical methods to geological problems. Emphasis on sampling plans, nature of geologic distributions, and application of analyses of variance to solving geological problems. Lec.

GLY 5932 SELECTED TOPICS IN GEOLOGY (1-4)
PR: Senior or advanced junior standing and CC. Each topic is a course in directed study under supervision of a faculty member. All areas of geology included. Departmental permission required prior to registration.

GERONTOLOGY

GEY 3000 INTRODUCTION TO GERONTOLOGY (3)
This course is designed to be an introduction to the study of aging. The aging process is viewed from a multi-disciplinary perspective including the biological, psychological, and sociological aspects of aging.

GEY 3601 BEHAVIOR CHANGES IN LATER LIFE (3)
PR: GEY 3000, or Cl. A survey of physical and psychological aspects of aging from middle age through older age. Course emphasis will be on basic age-related changes and their implications for behavior in older age.

GEY 3625 SOCIOCULTURAL ASPECTS OF AGING (3)
PR: GEY 3000 or Cl. Consideration of human aging in a broad sociocultural context. Course emphasis will be on historical, philosophic, and demographic aspects of aging, theories of social gerontology, attitudes toward aging and the aged, cross-cultural perspectives on aging, the sociology of retirement, and aging and the community.

GEY 4327 LONG-TERM CARE ADMINISTRATION I (3)
PR: GEY 3000, ACG 2011. A survey of Long Term Care (LTC) environments. Explored are such issues as definitions of LTC, physiologic conditions of LTC uses, the institutional setting, the sociopsychological context, and methods of evaluation and intervention.

GEY 4328 LONG-TERM CARE ADMINISTRATION II (3)
PR: GEY 4327. Administration of long-term care institutions from a group dynamics perspective. Emphasis on informed problem solving and decision-making via an analysis of the psychosocial and sociocultural environment in the nursing home community. Course objectives is to create efficient and humane living and working conditions in nursing homes.

GEY 4329 LONG-TERM CARE ADMINISTRATION III (3)
PR: GEY 4328. This course will familiarize the student with the basic aspects of nursing home administration through the practical application of management theory and concepts.

GEY 4360 GERONTOLOGICAL COUNSELING (3)
PR: Cl. An introduction to the study of the major mental health problems of the elderly. Current approaches to counseling the elderly are examined in the context of community and institutional settings are discussed.

GEY 4401 RESEARCH METHODS IN GERONTOLOGY (3)
PR: STA 3122 or equivalent. Restricted to Gerontology majors, others by departmental permission. Methods and techniques of social research in gerontology. Design of gerontological studies, collection and analysis of data, interpretation of results, and preparation of reports.

GEY 4640 DEATH AND DYING (3)
PR: GEY 3000 or Cl. A broad overview of the basic concepts and psychosocial issues relating to the meaning of death, the process of dying, and the experience of grief. Health care practices are considered along with community resources.

GEY 4900 DIRECTED READINGS (1-3)
PR: Cl. A reading program with topics in gerontology conducted under the supervision of a faculty member.

GEY 4930 SENIOR SEMINAR (2)
PR: Cl. This course will provide upper level students with a seminar experience in discussing topics of interest and social relevance in the field of aging. Each student will be required to prepare a seminar paper and present it.

GEY 4935 SPECIAL TOPICS IN GERONTOLOGY (3)
Courses on topics such as preirement, mental health, human services organization, nursing home administration, the older woman,
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<tr>
<td>AMH 3402</td>
<td>THE OLD SOUTH</td>
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<td>AMH 3403</td>
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<td>AMH 3421</td>
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<td>AMH 3428</td>
<td>TAMPA HISTORY</td>
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<td>AMH 3511</td>
<td>U.S. DIPLOMATIC HISTORY TO 1899 -6A</td>
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<td>IMMIGRATION HISTORY</td>
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<td>AMH 3561</td>
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<td>AMH 3800</td>
<td>HISTORY OF CANADA</td>
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**HISTORY**

AFH 3100 INTRODUCTION TO AFRICAN HISTORY (3)
An outline survey of pre-colonial African history including a prefatory introduction to the use of primary sources (such as archaeology, oral tradition, cultural anthropology, comparative linguistics, documents) in reconstructing the African past. (Also offered under Afro-American Studies.)

AMH 3100, 2020 AMERICAN HISTORY I, II (3,3)
A study of the United States with attention given to relevant developments in the Western Hemisphere. AMH 2010: European origins to 1877; AMH 2020: 1877 to present.

AMH 3110 AMERICAN COLONIAL HISTORY TO 1750 (4)
A study of the evolution of the American society from the Age of Reconnaissance to 1750. Attention is given to the transformation from colonies to provinces with emphasis on ethnocultural conflict, religion, labor systems, and political culture.

AMH 3130 THE AMERICAN REVOLUTIONARY ERA (4)
Emphasis on the causes of the American revolution, the nature of Constitution-making, and the establishment of the federal system. Also examines the significance of loyalty, violence, and slavery in American society from 1750-1789.

AMH 3140 THE AGE OF JEFFERSON (4)
A comprehensive study of American society and political culture from 1789-1828. Focuses on demographic trends, party systems, expansionism, Indian policy, labor, and ethno-cultural conflicts.

AMH 3160 THE AGE OF JACKSON (4)
The United States from 1828-1850, with emphasis on social and political conflict. Consideration of evangelicalism, reform, labor movements, urbanization, and political activity in the antebellum era.

AMH 3170 THE CIVIL WAR AND RECONSTRUCTION (4)
An examination of political, social, and economic climate of the 1850's that led to the American Civil War. The course does focus upon the war itself in its military, diplomatic, and political consequences through the end of the Reconstruction (1877).

AMH 3201 THE UNITED STATES, 1877-1929 (4)
A study of America from the end of Reconstruction to the stock market crash. Ranging over political, social, and diplomatic developments, the course covers industrialization, reform, imperialism, feminism, race relations and World War I.

AMH 3252 THE UNITED STATES SINCE 1929 (4)
The United States from the Great Depression to the present. Covering political, social and diplomatic developments, examines the New Deal, World War II, the Cold War, Viet Nam, civil rights, feminism and Watergate.

AMH 3402 THE OLD SOUTH (4)
A study of the American South from its colonial origins to the fall of the Confederacy in 1865. Emphasis on slavery and race, the Southern frontier, the development of sectional consciousness, and the coming of the Civil War.

AMH 3403 THE SOUTH SINCE 1865 (4)
Southern history since the surrender at Appomattox. Topics covered include Reconstruction, the Populist revolt, race relations, demogougy and disfranchisement, Southern women, and the Civil Rights Movement.

AMH 3421 EARLY FLORIDA (4)
A history of colonial Florida under the Spanish and English. Florida as an area of discovery, colonization, and imperial conflict; the emergence of Florida within the regional setting.

AMH 3423 MODERN FLORIDA (4)
An historical survey of Florida from the territorial period to the modern era. An examination of the social, political, and economic changes occurring in Florida between 1821 and the 1850s.

AMH 3428 TAMPA HISTORY (3)
Emphasizing the post-Civil War period, examines the origins of Tampa and the factors which made Tampa the center of a growing metropolitan area. The Tampa past will be studied against the state, national, and international developments.

AMH 3500 AMERICAN LABOR HISTORY (4)
A study of American workers from the colonial period to the present. Examines the changing nature of work, its effects of workers (including minorities and women), and their responses as expressed in strikes, unions, and political action.

AMH 3510 U.S. DIPLOMATIC HISTORY TO 1899 -6A (3)
The development of American Foreign Relations in the Agricultural era.

AMH 3511 U.S. DIPLOMATIC HISTORY IN THE 20TH CENTURY -6A (3)
A history of American Foreign Relations in the Industrial era.

AMH 3539 IMMIGRATION HISTORY (4)
A study of the composition and character of the "American" people with emphasis on the period from 1840s to the 1920s. Examines old world backgrounds of immigrants and their responses to the new world's social, economic and political conditions.

AMH 3540 UNITED STATES MILITARY HISTORY (4)
A study of American military policy and practices from colonial days to the present. Attention is given both to tactics and to strategy in the unfolding formulation and development of American armed might.

AMH 3545 WAR AND AMERICAN EMPIRE (4)
The U.S. evolved in 200 years from 13 colonies to the number one power in the world. To achieve this goal we utilized war to achieve empire. This course will examine the link between American War and empire from the Revolution through Viet Nam.

AMH 3561 AMERICAN WOMEN I (4)
A study of women in the evolution of American society from European origins to 1877. Women's roles in the family, economy, politics, wars, and reform movements will be examined. (May also be taken for credit in Women's Studies.)

AMH 3562 AMERICAN WOMEN II (4)
A study of women in the evolution of American society from 1877 to the present. Women's roles in the family, economy, politics, immigration, wars, religion and reform movements will be examined. (May also be taken for credit in Women's Studies.)

AMH 3800 HISTORY OF CANADA (4)
A study of Canadian experience from its French origins through the British conquest to its present multi-racial character. Attention will also be given to the forces of nationalism, separatism, and regionalism.

ASH 3404 MODERN CHINA (4)
Political, economic, and social history of China from the time of the first major Western contacts (17th-18th Centuries) through the consolidation of socialism in the late 1950's, and the Great Leap Forward.
A study of the major themes of Indian history from the Indus culture to the present. Emphasis will be given to the Classical, Mogul and British periods as well as the modern independent sub-continent.

EUH 2011, 2012 ANCIENT HISTORY I, II
An introductory survey of ancient history. EUH 2011 treats the ancient Near East and Greece from the origins of civilization to the full development of the Hellenistic kingdoms prior to conflict with Rome. EUH 2012 deals with Rome through the Regal, Republican, and Imperial periods, from the beginnings of civilization in Italy to the division of the Roman Empire, A.D. 395.

EUH 2021, 2022 MEDIEVAL HISTORY I, II
A thematic survey of the Middle Ages. EUH 2021 deals with the nascent, Christian civilization of European, circa 300-1050 A.D.; EUH 2022 treats the mature medieval civilization of Europe, circa 1050-1500.

EUH 2030, 2031 MODERN EUROPEAN HISTORY I, II
A thematic survey of Europe in the modern age. EUH 2030 treats the period from the Renaissance to the French Revolution; EUH 2031, from the French Revolution to the present.

EUH 3142 RENAISSANCE AND REFORMATION
A history of Europe from the Renaissance to the Thirty Years' War (1400-1618). The cultural, social, and economic characteristics will provide the framework for artistic, philosophical, religious, and political developments.

EUH 3161 MEDIEVAL CULTURE
A survey of thought, culture, and art in the Middle Ages. Medieval attitudes as manifested in literature, art, philosophy, education, and religion; with emphasis upon Medieval man's changing perception of himself and his world.

EUH 3185 VIKING HISTORY
The role of the Vikings in the shaping of Western history. A comprehensive survey of their institutions, outlook and daily life. Viking expansion into Europe and North America.

EUH 3188 MEDIEVAL SOCIETY
A study of the daily life and attitudes of the medieval nobleman, peasant, townsmen, and the agrarian-urban economy and society which affected their lives.

EUH 3189 MEDIEVAL POLITICS
An inquiry into the nature, distribution, and use of political power during the Middle Ages, in such institutions as feudalism, monarchy, cities, and the church.

EUH 3202 HISTORY OF 17TH AND 18TH CENTURY EUROPE
A history of Europe from the beginning of the Thirty Years' War to the outbreak of the French Revolution. Political and intellectual developments will be assessed in the light of society and the economy.

EUH 3205 HISTORY OF NINETEENTH CENTURY EUROPE
A comparative study of economic, political, social, and intellectual developments in nineteenth century Europe.

EUH 3206 HISTORY OF TWENTIETH CENTURY EUROPE
A comparative study of economic, political, social, and intellectual developments in twentieth century Europe.

EUH 3300 BYZANTINE HISTORY
A survey of the Byzantine (Eastern Roman) Empire from its foundation in A.D. 330 to its collapse in 1453. Emphasis on the relationship between the Byzantine Empire and the course of European history and on the cultural heritage of this Empire.

EUH 3401 CLASSICAL GREECE
A study of ancient Greece focusing on the brilliant period following the Persian Wars, but embracing as well the formative Bronze, Middle and Archaic ages, and the decline culminating in the conquest of Greece by Philip II of Macedon in 338 B.C.

EUH 3402 AGE OF ALEXANDER
A study focusing on the career of Alexander the Great and on the Greek and Macedonian conquest of Imperial Persia. Also treated are the great Hellenistic kingdoms prior to Rome's conquest of the eastern Mediterranean.

EUH 3412 ROMAN REPUBLIC
A study of the Roman Republic from 509 B.C. to the assassination of Julius Caesar in 44 B.C., with a prelude treating Rome's early development under royal rule. Political growth and change provide the framework for the treatment.

EUH 3413 ROMAN EMPIRE
A study of Imperial Roman from the assassination of Julius Caesar in 44 B.C. to the death of the emperor Constantine in A.D. 337. Emphasized is Rome's government of a vast Mediterranean empire including much of the near East and Europe.

EUH 3461 GERMAN HISTORY TO 1870
A political, social, and cultural approach to the history of the Germanies from 1500 through 1870, with emphasis on the Protestant Reformation, the rise of Brandenburg-Prussian, and the unification under Bismarck.

EUH 3462 GERMAN HISTORY 1870 TO PRESENT
A political, social, and cultural approach to the history of the German Empire from 1870 through the 1970's. The nation's two attempts to try for world power status are highlighted, as well as the Weimar Republic, prototype of the embattled democracy.

EUH 3501 BRITISH HISTORY TO 1668
A study of major developments in British history from the 15th century to 1668.

EUH 3502 BRITISH HISTORY 1668 TO PRESENT
A study of the major themes of British history since the Glorious Revolution, including social, political, and economic developments leading to the creation of the modern demographic welfare state.

EUH 3530 BRITISH EMPIRE AND COMMONWEALTH
A study of the development of the British Empire from the age of initial expansion overseas to the creation of the multinational commonwealth. Included are examinations of theory and myth of colonialism as well as the literature of imperialism.

EUH 3571 RUSSIAN HISTORY TO 1865
A survey of the social, political, economic, and cultural development of Russia from the year 800 to 1865. Topics include the personality of Russian rulers, the origins of Russian Socialism, and Russia's relationship to the West.

EUH 3572 RUSSIAN HISTORY 1865 TO PRESENT
An analysis of the tradition from late imperial society to the contemporary Soviet system. Emphasis will be placed on continuity and change in the economic, political, and cultural aspects of Russia from 1865 to present.

HIS 2931 SPECIAL TOPICS
This course emphasizes a selected historical problem or issue. A variety of instructional approaches will be taken, and topics may vary.

HIS 3474 SCIENCE AND CIVILIZATION - 6A
A thematic study of the interrelationship of science and society in modern history emphasizing the institutional forms, value structures, and social relations in science as they have developed from the scientific revolution to the present.

HIS 3930 SPECIAL TOPICS
This course is designed to emphasize a selected historical problem or issue that is meaningful and challenging to the student. A variety of instructional approaches will be taken to the material. Topics will be changed each semester.

HIS 4104 THEORY OF HISTORY
Recommended to be taken during the senior year. Required of all history majors. An analysis of the foundations of historical knowledge and historical methodology. Includes a survey of historical thinking and writing from ancient times to the present.

HIS 4900 DIRECTED READING
PR: Cl. Arrangement with instructor prior to registration. Readings in special topics.

HIS 4920 COLLOQUIUM IN HISTORY
Reading and discussion of selected topics in the various fields of history. The subject and scope of inquiry will be determined by the instructor for each section. May be repeated for credit.

HIS 4935 PRO-SEMINAR IN HISTORY
PR: Cl. Advanced topics in the various fields of history. Emphasis on discussion of assigned readings and on research and writing of a major paper. Required of all history majors. May be repeated up to 12 credit hours.
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 3243 STUDIES IN CULTURE: THE RENAISSANCE AND THE NINETEENTH CENTURY (3)
Analyses of selected fiction, drama, painting, architecture, music and other art forms.

HUM 3251 STUDIES IN CULTURE: THE TWENTIETH CENTURY (3)
Analyses of selected works of twentieth century art, primarily emphasizing film, with secondary emphasis on painting and fiction.

HUM 3271 THE CULTURE OF THE EAST AND WEST I (4)
Masterpieces of music, visual arts, theatre, literature, and philosophy in varying cultural and historical situations.

HUM 3273 THE CULTURE OF THE EAST AND WEST II (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 4402 HUMANITIES IN THE ORIENT: INDIA (4)
PR: Sophomore standing or Cl. Examples from the arts and letters of India and the relationship of these arts to the Hindu and Buddhist philosophy-religions.

HUM 4404 HUMANITIES IN THE ORIENT: CHINA (4)
PR: Sophomore standing or Cl. 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 4405 HUMANITIES IN THE ORIENT: JAPAN (4)
PR: Sophomore standing or Cl. 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 4433 CLASSICAL ARTS AND LETTERS I (4)
PR: Sophomore standing or Cl. A study of the poetry, drama, philosophy, historical writing, painting, sculpture and architecture of ancient Greece, including such authors as Homer, Sophocles, and Plato, and monuments such as the Parthenon.

HUM 4434 CLASSICAL ARTS AND LETTERS II (4)
PR: Sophomore standing or Cl. A study of the poetry, drama, philosophy, historical writing, painting, sculpture and architecture of ancient Rome, including such authors as Virgil, Livy, and Cicero, the monuments of Rome, Pompeii, and the Herculaneum.

HUM 4435 MEDIEVAL ARTS AND LETTERS I (4)
PR: Sophomore standing or Cl. A study of the culture of Europe and the Mediterranean world from the 4th to 11th centuries through readings of early Medieval historians, poets, and theologians, as well as the study of illuminated manuscripts, mosaics, painting, and architecture.

HUM 4436 MEDIEVAL ARTS AND LETTERS II (4)
PR: Sophomore standing or Cl. A study of the culture of Western Europe from the 9th to 14th centuries. Readings will include poetry and religious works; examples of painting, architecture, sculpture and music will be studied.

HUM 4440 RENAISSANCE ARTS AND LETTERS I -6A (4)
PR: Sophomore standing or Cl. A study of the Italian Renaissance, 1300-1580, emphasizing Humanism, painting, architecture, literature, music and sculpture. Special study will be done of Petrarch, Giotto, DaVinci, and Michelangelo.

HUM 4438 RENAISSANCE ARTS AND LETTERS II -6A (4)
PR: Sophomore standing or Cl. A study of the Northern Renaissance (1400-1580) as exemplified in Germany, France, the Netherlands, England, and Spain. The course includes painting, architecture, literature and music, with special study of Durer, Van Eyck, El Greco, and Bosch.

HUM 4440 ARTS AND LETTERS IN THE 17TH AND 18TH CENTURIES -6A (4)
PR: Sophomore standing or Cl. This course includes the arts, literature, and music of the Baroque, Rococo, and Neo-Classical
periods with special study of Rubens, Rembrandt, Bach, Haydn, and Mozart.

HUM 4442 ARTS AND LETTERS OF THE ROMANTIC PERIOD (4)
PR: Sophomore standing or CI. Continental masterworks of fiction, painting, and music in the context of European cultural history from the French Revolution to the Revolutions of 1848.

HUM 4444 NINETEENTH CENTURY ARTS AND LETTERS (4)
PR: Sophomore standing or CI. A study of continental literary, musical, and artistic masterworks from the Revolutions of 1848 until the outbreak of World War I.

HUM 4445 TWENTIETH CENTURY ARTS AND LETTERS I (4)
PR: Sophomore standing or CI. Analysis of selected works of twentieth century art. The course will focus on a particular phase in the development of modernism, a set of themes, or certain stylistic aspects of the various arts of the twentieth century.

HUM 4446 TWENTIETH CENTURY ARTS AND LETTERS II (4)
PR: Sophomore standing or CI. Analysis of selected works of twentieth century art. The course will focus on a particular phase in the development of modernism, a set of themes, or certain stylistic aspects of various arts of the twentieth century.

HUM 4452 HUMANITIES IN AMERICA I (4)
PR: Sophomore standing or CI. Study of selected works of art, tracing the course of westward expansion in civilization, and the interaction between the arts and the sciences in American ways of life and work, 1790-1890.

HUM 4453 HUMANITIES IN AMERICA II (4)
PR: Sophomore standing or CI. Study of selected works, tracing the course of expansion in the production and enjoyment of works of art, and interaction between the idealistic and pragmatic concerns for development of the arts in the 20th century.

HUM 4462 LATIN AMERICAN ARTS AND LETTERS I (4)
PR: Sophomore standing or CI. Analysis of selected Latin American works of art in their cultural context, with emphasis on major art forms selected from the Pre-Columbian period.

HUM 4464 LATIN AMERICAN ARTS AND LETTERS II (4)
PR: Sophomore standing or CI. Analysis of selected Latin American works of art in their cultural context, with emphasis on major art forms selected from the colonial through contemporary periods.

HUM 4905 DIRECTED STUDY (1-4)
PR: CI. 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 1920s. 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. (Fall term only.)

HUM 4941 STUDY ON LOCATION
PR: 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.

HUMAN SERVICES

HUS 3001 INTRODUCTION TO HUMAN SERVICES (3)
An introduction to the field of human services. Study of the professions and agencies involved in providing human services. Analysis of the values and ethics of various professional associations.

HUS 4020 THE LIFE CYCLE (4)
An examination of individuals and the physiological and psychosocial changes which occur during infancy, childhood, adolescence, young adulthood, middle age and old age.

HUS 4100 (formerly MHT 4302) INTERVIEWING (3)
PR: HUS 3001 or CI. The principles and techniques of interviewing. Use of interviewing in information gathering, research and helping relationships and developing skills in communication across cultural, social and age barriers.

HUS 4700 PLANNING AND EVALUATION OF HUMAN SERVICES PROGRAMS (3)
PR: HUS 3001 or CI. Review of approaches to planning, coordination, and evaluation of human services programs in health, rehabilitation, welfare and community action programs. Applications of planning and evaluation techniques.

HUS 5325 INTERVENTION TECHNIQUES (3)
PR: HUS 3001 or CI. Attention will be given to techniques of intervention at individual, small group, and community levels. The need for crisis intervention programs in modern society.

SOV 4332 COMMUNITY ORGANIZATION AND DEVELOPMENT (3)
PR: HUS 3001 or CI. An interdisciplinary approach to community organization and development. A synthesis of social, cultural, psychological, economic, and political information concerning community structure and change.

INTERDISCIPLINARY SOCIAL SCIENCES

ISS 3010 INTRODUCTION TO THE SOCIAL SCIENCES (3)
An introduction to the fields within the social sciences. Emphasis is placed on the concepts, theories methodologies and applications used in the social sciences. Course may be taken by non-majors.

ISS 3930 SELECTED TOPICS IN THE SOCIAL SCIENCES (1-4)
Interdisciplinary studies with course content dependent on student demand and instructor's interest. May be repeated as topics vary.

ISS 4162 THE CITY AND URBANIZATION (3)
An interdisciplinary perspective will be used to analyze the emergence of the city and the urban revolution. Urban planning and governance will be examined in looking at how urban areas deal with social and physical problems.

ISS 4164 URBAN SOCIAL ISSUES: AN INTERDISCIPLINARY APPROACH (3)
This course is designed to examine current social issues from an interdisciplinary perspective. Topic selection will be within the broad framework of technological changes, economic conditions, political ideologies, and their impact on changing social patterns.

ISS 4900 DIRECTED READINGS (1-3)
PR: CI. A supervised program of intensive reading of interdisciplinary materials in areas of specific interest. May be repeated.

ISS 4910 DIRECTED RESEARCH (1-3)
PR: CI. A supervised program of interdisciplinary research in areas of specific interest. May be repeated.

ISS 4935 SELECTED TOPICS (1-3)
PR: CI plus senior standing or graduate status. Interdisciplinary studies with course content dependent on student demand and instructor's interest. May be repeated as topics vary.

STA 3122 SOCIAL SCIENCE STATISTICS-6A (3)
This course is designed to introduce concepts, theories, and assumptions that underlie specific techniques used in the social sciences. Emphasis is placed on selection of appropriate techniques given the research design to be utilized.

INTERNATIONAL STUDIES

AREA STUDIES
Area study courses are multi-disciplinary in nature and deal with one or more countries of a region. Each course combines some measure of political, economic, historical, religious, geographic, anthropological, and sociological analysis in dealing with salient features and current problems. The same course may be repeated, but only when the countries of concentration differ. The regularly offered area study courses are:

ASN 3030 THE MIDDLE EAST
EUS 3000 EUROPE
LAS 3002 LATIN AMERICA
AFA 4150 AFRICA AND THE UNITED STATES (3)
ASN 3012 JAPAN TODAY (3)
ASN 3014 CHINA TODAY (3)
EUS 3222 SOVIET UNION TODAY (3)
INR 2065 WORLD TENSIONS (2)
A study of the major causes and consequences of critical tensions which lead to serious social disturbances among and within the independent states of the world.

INR 3003 INTRODUCTION TO INTERNATIONAL STUDIES (3)
An interdisciplinary study which stresses methods and analysis. A major portion will focus on the roles which different disciplines play in interpreting the international scene.

INR 3036 INTERNATIONAL WEALTH AND POWER (3)
Introduction to the relationship between politics and economics, emphasizing the analysis of government policies in response to both domestic and international economic problems.

INR 3060 ACTORS IN THE INTERNATIONAL SYSTEM (3)
An examination of the subnational, national, and transnational institutions to include ethnic groups, insurgents, nation-states, nationalism, multinational corporations, international organizations, and major religions.

INR 3163 ISSUES IN THE INTERNATIONAL SYSTEM (3)
A study which emphasizes the problems and processes of international actors. Focuses on issues related to war and peace, political economy, and social welfare topics.

ISS 1211 WORLD PERSPECTIVE (3)
An interdisciplinary study of the international system, major world regions and problems.

ISS 2221 U.S. FOREIGN POLICY (3)
A multidisciplinary study of America's role in world affairs, emphasizing current problems and issues in the formulation and implementation of foreign policy.

ISS 3260 WORLD IDEOLOGIES (3)
A course which details and examines the ideologies of today's independent countries; analyzing them in their political, social, cultural and historical context.

ISS 3242 INTERNATIONAL TERRORISM (3)
A study of contemporary international terrorism and its causes, ranging from national liberation movements to networks of philosophical anarchists.

ISS 3770 COMPARATIVE MILITARY SYSTEMS (3)
A comparative study of the military institutions of various nations are organized and interact with politics, societies and economies.

ISS 3955 OVERSEAS STUDY (1-6)
A program of individual or group research in a foreign country.

ISS 4250 THE EMERGING NATIONS (3)
A multidisciplinary study of the efforts of third world nations to improve their status through economic development.

ISS 4900 DIRECTED READINGS (1-3)
PR: CI. A supervised program of intensive reading of interdisciplinary materials in areas of specific interest. May be repeated.

ISS 4910 DIRECTED RESEARCH (1-3)
PR: CI. A supervised program of interdisciplinary research in areas of specific interest. May be repeated.

ISS 4931 SELECTED TOPICS (1-4)
Interdisciplinary studies with course content dependent on student demand and instructor's interest. May be repeated as topics vary.

ISS 4936 SENIOR SEMINAR (3)
PR: International Studies major and senior standing. A variable topics seminar integrating concepts and analyses relating to the academic background of INT majors. Should be taken in the student's final semester.

WST 3275 WOMEN IN THE DEVELOPING WORLD (3)
A comparative study of women's status in various developing nations with that in various industrialized states. (Also offered under Women's Studies Program.)

LANGUAGE

General Foreign Languages
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 4101 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.

FOL 5906 DIRECTED STUDY (1-3)
PR: FOL 4200 or equivalent.

Arabic
ARA 1120 MODERN ARABIC I (4)
An intensive study of basic skills: pronunciation, listening comprehension, speaking and some composition.

ARA 1121 MODERN ARABIC II (4)
PR: ARA 1120 or its equivalent. A continuation of ARA 1120. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.

Chinese
CHI 1120 MODERN CHINESE I (4)
Mandarin. An intensive study of basic skills: pronunciation, listening comprehension, speaking, and some composition.

CHI 1121 MODERN CHINESE II (4)
Mandarin. PR: CHI 1120 or equivalent. A continuation of CHI 1120. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.

French
FRE 1040 FRENCH FOR READING (3)
Designed to provide a reading ability in French that will support research in other disciplines. Primarily for graduate students.

FRE 1120 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 1121 BEGINNING FRENCH II (4)
PR: FRE 1120 or equivalent. A continuation of FRE 1120.

FRE 1170 OVERSEAS STUDY-ELEM. FRENCH (4)
Elementary-level French taught in France. In lieu of FRE 1120 and FRE 1121. No credit toward a major or minor in French. May be repeated up to 8 credit hours.

FRE 2200 FRENCH III (3)
PR: FRE 1121 or equivalent. A review of the basic structure of French. May be taken concurrently with FRE 2201.

FRE 2201 FRENCH IV (3)
PR: FRE 1121 or equivalent. Readings in French on the intermediate level. May be taken concurrently with FRE 2200.

FRE 2241 CONVERSATION I (3)
PR: FRE 1121. For development of basic conversational skills.

FRE 2270 OVERSEAS STUDY-INTR. FRENCH (3-6)
Two semesters of university-level French or equivalent proficiency. At USF this equates to FRE 1120 (4 credits) plus FRE 1121 (4 credits) or FRE 1470. May be repeated up to 6 credit hours.

FRE 3230 READING IN FRENCH LITERATURE AND CULTURE (3)
PR: FRE 2201 or equivalent. This course is designed to build reading
skills in French while giving students a broad background in culture which will serve them in all subsequent courses.

FRW 3244 CONVERSATION II
PR: FWE 2241 or equivalent proficiency. Conversation practice with concentration on current idiomatic usage.

FRW 3420 COMPOSITION I
A fundamental composition course for students who have completed FWE 2200 or FWE 2201.

FRW 3440 FRENCH FOR BUSINESS
PR: FWE 1121 or equivalent. An introduction to the French language in ordinary business transactions.

FRW 3470 OVERSEAS STUDY
An intensive study-travel project in France. Prior approval and early registration required. May be repeated up to 12 credit hours.

FRW 3500 FRENCH CIVILIZATION
Readings and discussion on the cultural history of France.

FRW 4421 COMPOSITION II
Continuation of French composition. This course is designed to follow FWE 3420.

FRW 4470 ADVANCED OVERSEAS STUDY
PR: FWE 3470 or CI. Intensive language study in France. Departmental approval required.

FRW 4905 DIRECTED STUDY
Departmental approval required.

FRW 4930 SELECTED TOPICS
Study of an author, movement or theme.

FRW 5425 ADVANCED WRITTEN EXPRESSION
PR: FWE 4421, or equivalent. Course is designed to give advanced training in free composition in French.

FRW 5565 CONTEMPORARY FRANCE
PR: FWE 3910, or equivalent or graduate standing. An advanced course in French civilization and culture including a study of recent social, artistic and political trends as well as various current intellectual movements. Text and discussions in French.

FRW 4100 INTRODUCTION TO FRENCH NOVEL
A study of the history of the novel from its earliest 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
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, Masset, Baudelaire, Mallarme, Rimbaud, Valery, Peguy, Eluard, Apollinaire, Char, and others. Course content may vary from year to year.

FRW 5222 CLASSICAL PROSE AND POETRY
PR: FRW 4101. Emphasis on Malherbe, La Fontaine, Boileau, Descartes, and Pascal.

FRW 5226 20TH CENTURY POETRY AND THEATRE

FRW 5286 THE 20TH CENTURY NOVEL
PR: FRW 4100. Proust, Gide, Mauriac, Malraux, Camus, Robbe-Grillet.

FRW 5310 CLASSICAL DRAMA
PR: FRW 4101. Corneille, Moliere, and Racine.

FRW 5415 LITERATURE OF THE MIDDLE AGES
PR: FRW 4000 or 4011. Major genres, including epics, Arthurian romances, drama and lyric poetry. Reading in modern French translation.

FRW 5425 LITERATURE OF THE RENAISSANCE
PR: FRW 4100 or 4101. A study of Renaissance French humanism including Rabelais, Montaigne, and Pleiade poets.

FRW 5445 18TH CENTURY LITERATURE
PR: FRW 4100. The classical tradition and the new currents of thought in the Age of Enlightenment.

FRW 5528 PRE-ROMANTICISM

FRW 5555 ROMANTICISM
PR: FRW 4101. A study of the romantic and early realistic movements with emphasis on Lamartine, Vigny, Musset, Hugo and Balzac.

FRW 5556 REALISM AND NATURALISM
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
PR: Upper-level or graduate standing. Study of an author, movement or genre.

German

GER 1120 BEGINNING GERMAN I
Development of basic skills in listening and reading comprehension, speaking and writing of German.

GER 1121 BEGINNING GERMAN II
PR: GER 1120 or equivalent. Continued development of basic skills in listening and reading comprehension, speaking and writing German.

GER 2200 GERMAN III
PR: GER 1121 or equivalent. A review of the basic structure of spoken and written German. May be taken concurrently with GER 2201.

GER 2201 GERMAN IV
PR: GER 1121 or equivalent. Readings in German on the intermediate level. May be taken concurrently with GER 2200.

GER 3244 CONVERSATION I
PR: GER 1121. For development of basic conversational skills.

GER 3420 COMPOSITION I
A fundamental course for students who have completed GER 2200 or GER 2201.

GER 3500 GERMAN CIVILIZATION
PR: GER 2200 or GER 2201. Readings in German on the cultural history of Germany.

GER 4410 CONVERSATION II
Free conversation based on the current German idiom.

GER 4421 COMPOSITION II
PR: GER 3420. Practical training in modern German usage and differences of style.

GER 5845 HISTORY OF THE GERMAN LANGUAGE
A diachronic approach 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.

GEW 4100 SURVEY OF GERMAN LITERATURE I
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
The romantic period, 19th and 20th centuries.

GEW 4900 DIRECTED STUDY
Departmental approval required.

GEW 4930 SELECTED TOPICS
Study of an author, movement or genre.

GEW 5475 20TH CENTURY LITERATURE TO 1945
A study of major styles in German literature from 1900 to WW II with emphasis on Hauptmann, Schnitzler, Hofmannsthal, George Rilke, Singer, Heym, Trakl, Thomas Mann, Hesse, Kafka, Benn, Brecht.

GEW 5508 20TH CENTURY LITERATURE: 1945 TO PRESENT
Study of major trends in German literature since WW II with emphasis on Borchert, Frisch, Durrenmatt, Boll, Uwe, Johnson, Grass, Aichinger, Eich Enzensberger, Bachmann.

GEW 5515 THE ENLIGHTENMENT
Selected dramas and critical writings by Lessing, Wieland, Kant.

GEW 5545 ROMANTICISM
Jenaer circle and Heidelberger circle; the late romantic period, the writers between Classicism and Romanticism.
GEW 5555 REALISM  
Selected works by Grillparzer, Grabbe, Buchner, Hebbel, Heine, Immerman, Stifter, Keller, Meyer, Storm, Raabe, Hulshoff, and Morike.  

GEW 5605 GOETHE  

GEW 5606 FAUST  
Studies, form, content, and literary significance of Urfaust and Faust.  

GEW 5615 SCHILLER  
Selected dramas, philosophical and aesthetic writings.  

GEW 5934 SELECTED TOPICS  
PR: Upper-level or graduate standing. Study of an author, movement or theme.  

Hebrew  
HBR 1120 MODERN HEBREW I  
An intensive study of basic skills: pronunciation, listening comprehension, speaking, and some composition.  

HBR 1121 MODERN HEBREW II  
PR: HBR 1120 or equivalent. A continuation of HBR 1120. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.  

Italian  
ITA 1120 BEGINNING ITALIAN I  
The first course in the study of elementary Italian. Emphasis is on the development of basic skills in comprehension, speaking, and reading.  

ITA 1121 BEGINNING ITALIAN II  
The second course in the study of elementary Italian. Emphasis is on the development of basic skills in comprehension, speaking and reading.  

ITA 2200 INTERMEDIATE ITALIAN I  
PR: ITA 1121 or equivalent. Readings in Italian on the elementary level. A review of the basic structure of spoken and written Italian.  

ITA 3240 ITALIAN CONVERSATION I  
To develop fluency and correctness in spoken Italian. Intensive study for conversational skill based particularly on the current Italian idiom. Syntax is intensified and the vocabulary and idiomatic expressions expanded.  

ITA 3420 COMPOSITION  
A fundamental composition course for students who have completed ITA 2200 and ITA 2201.  

ITA 3470 OVERSEAS STUDY  
An intensive study-travel project in Italy. Prior approval and early registration required. May be repeated up to 12 credit hours.  

ITA 4241 ITALIAN CONVERSATION II  
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.  

ITW 4100 SURVEY OF ITALIAN LITERATURE I  
A survey of Italian literature from the earliest monuments through the classicism of the 18th century.  

ITW 4101 SURVEY OF ITALIAN LITERATURE II  
A survey of Italian literature beginning with the Classicism of the 18th century and continuing to present.  

ITW 4905 DIRECTED STUDY  
Departmental approval required.  

Japanese  
JPN 1120 MODERN JAPANESE I  
An intensive study of basic skills: pronunciation, listening comprehension, speaking, and some composition.  

JPN 1121 MODERN JAPANESE II  
PR: JPN 1120 or equivalent. A continuation of JPN 1120. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.  

Polish  
POL 1120 BEGINNING POLISH I  
This course features all four major skills: listening, reading, speaking, and writing. Grammar exercises, dictation, readings and vocabulary-building are central in this first course. Knowledge of Russian can help. S/U available.  

POL 1121 BEGINNING POLISH II  
PR: POL 1120 or equivalent by examination. This course continues the four basic skills of POL 1120, with continued emphasis on structures, dialogues, readings, dictation, and vocabulary-building. Knowledge of Russian can help. S/U available.  

Portuguese  
POR 1120 BEGINNING PORTUGESE I  
Development of basic skills in listening and reading comprehension, speaking and writing of Brazilian Portuguese.  

POR 1121 BEGINNING PORTUGESE II  
PR: POR 1120 or equivalent. Continued development of basic skills in listening and reading comprehension, speaking and writing of Brazilian Portuguese.  

POR 2200 INTERMEDIATE PORTUGESE I  
POR 2200 builds upon the four language skills (speaking, comprehension, reading, and writing) introduced in POR 1120 and POR 1121. It is available to all foreign language students and includes lab attendance of at least two hours per week. May not be repeated for credit.  

POR 2201 INTERMEDIATE PORTUGESE II  
For language students who intend to attain basic proficiency. There is a two-hour lab each week which can be taken in smaller segments. May not be repeated for extra credit.  

Russian  
RUS 1120 BEGINNING RUSSIAN I  
The first course in the study of elementary Russian. Emphasis on the development of basic skills in comprehension, speaking and reading.  

RUS 1121 BEGINNING RUSSIAN II  
PR: RUS 1120 or Cl. The second course in the study of elementary Russian. Emphasis on the development of basic skills in comprehension, speaking and reading.  

RUS 2200 RUSSIAN III  
PR: First year Russian or equivalent. Review and development of basic skills in conversation, composition, and reading.  

RUS 2201 RUSSIAN IV  
PR: RUS 2200 or equivalent. Review and development of basic skills in conversation, composition, and reading.  

RUS 3240 CONVERSATION I  
PR: Second year Russian or equivalent. Development of basic conversational skills.  

RUS 3500 RUSSIAN CIVILIZATION - 6A  
A survey of the cultural history of Russia.  

RUS 4241 CONVERSATION II  
PR: Previous course in series or equivalent. Development of conversational skills.  

RUS 4402 ADVANCED RUSSIAN CONVERSATION & COMPOSITION I  
PR: RUS 4241 or Cl. Third year Russian.  

RUS 4403 ADVANCED RUSSIAN CONVERSATION & COMPOSITION II  
PR: RUS 4241 or Cl. Third year Russian.  

RUS 4900 SELECTED TOPICS  
Study of an author, movement or theme.  

RUS 4905 DIRECTED STUDY  
Departmental approval required.  

RUT 3110 RUSSIAN CLASSICS IN TRANSLATION - 6A  
Masterpieces of 19th century Russian literature in English. The major works of Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Elective for all students in all departments.
SPN 1120 BEGINNING SPANISH I
Development of basic skills in listening and reading comprehension, speaking and writing of Spanish.

SPN 1121 (BEGINNING SPANISH II
PR: SPN 1120 or equivalent. Continued development of basic skills in listening and reading comprehension, speaking and writing of Spanish.

SPN 1130 ACCELERATED SPANISH FOR NEAR-NATIVE SPEAKERS AND OTHERS
PR: CI. Accelerated course for near-native speakers and others with some knowledge of Spanish capable of making rapid progress.

SPN 2200 SPANISH III
PR: SPN 1121 or equivalent. A review of the basic structure of spoken and written Spanish. May be taken concurrently with SPN 2201.

SPN 2201 SPANISH IV
PR: SPN 1121 or equivalent. Readings in Spanish on the intermediate level. May be taken concurrently with SPN 2200.

SPN 2240 CONVERSATION I
PR: SPN 1121. For development of basic conversational skills.

SPN 2241 CONVERSATION II
PR: SPN 2240 or equivalent. To improve fluency in spoken Spanish.

SPN 3300 COMPOSITION
PR: SPN 2200-2201. A study of syntax, grammar and writing.

SPN 3340 SPANISH FOR BUSINESS
PR: SPN 2201 or equivalent. An introduction to the Spanish language as used in undertaking ordinary business transactions.

SPN 3470 OVERSEAS STUDY
PR: SPN 1121. An intensive study-travel program in a Spanish-speaking country. Prior departmental approval and early registration are required.

SPN 3500 MODERN SPANISH WORLD
PR: SPN 1121. The culture and civilization of Spain.

SPN 3520 SPANISH AMERICAN CIVILIZATION
Readings and discussions on the culture and civilization of Spanish America. For majors and non-majors.

SPN 4301 EXPOSITORY WRITING
PR: SPN 3300. Practical training in contemporary Spanish structure, usage and stylistic devices.

SPN 4410 ADVANCED CONVERSATION
PR: SPN 3241 or equivalent. Intensive practice in the formulation and expression of ideas in standard Spanish.

SPN 4470 ADVANCED OVERSEAS STUDY

SPN 5567 MODERN SPANISH CIVILIZATION
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 6795 (PHONOLOGY AND PHONETICS
PR: SPN 3300. A study of the Spanish sound system.

SPN 6845 HISTORY OF THE SPANISH LANGUAGE
Traces the development of Spanish from its Latin origins to the present.

SPW 3030 INTRODUCTION TO HISPANIC LITERATURE
PR: SPW 2201 or equivalent. Prose fiction, drama, poetry, and essay: techniques of literary analysis.

SPW 4100 SURVEY OF SPANISH LITERATURE I
PR: SPW 3030 or equivalent. A study of Spanish literature from its origins through the 17th century.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN 3010</td>
<td>INTRODUCTION TO LINGUISTICS</td>
<td>(3)</td>
<td>Introduction to the basic principles of linguistic science; phonological and grammatical analysis and description; language change and genetic relationships.</td>
</tr>
<tr>
<td>LIN 3801</td>
<td>LANGUAGE AND MEANING -6A</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>LIN 4040</td>
<td>DESCRIPTIVE LINGUISTICS</td>
<td>(3)</td>
<td>Methods of analyzing 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.</td>
</tr>
<tr>
<td>LIN 4575</td>
<td>LANGUAGE TYPES OF THE WORLD</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>LIN 4600</td>
<td>LANGUAGE AND SOCIETY</td>
<td>(3)</td>
<td>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, educational, and racial groups. Problems in communication between strata.</td>
</tr>
<tr>
<td>LIN 4710</td>
<td>LANGUAGE AND COMMUNICATION: ACQUISITION AND DEVELOPMENT</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>LIN 4903</td>
<td>DIRECTED READING</td>
<td>(1-3)</td>
<td>PR: CI. Readings in special topics. Must be arranged prior to registration.</td>
</tr>
<tr>
<td>LIN 4930</td>
<td>SELECTED TOPICS</td>
<td>(1-3)</td>
<td>PR: CI. Course content depends upon students' needs and instructor's interest and may range over the entire field of linguistics.</td>
</tr>
<tr>
<td>OCB 5050</td>
<td>BIOLOGICAL OCEANOGRAPHY</td>
<td>(3)</td>
<td>PR: Graduate standing, CI. The study of life in the sea with reference to distribution, reproduction, adaptation, competition, and populations. Lec.-lab.</td>
</tr>
<tr>
<td>OCC 5050</td>
<td>CHEMICAL OCEANOGRAPHY</td>
<td>(3)</td>
<td>PR: CHM 2046 and CI. The ocean as a chemical system, including composition, physical-chemical aspects, role of nutrients, trace metals, interaction between bottom and overlying water, modern methods of analysis in routine use in oceanography. Lec.-lab.</td>
</tr>
<tr>
<td>OCE 3001</td>
<td>INTRODUCTION TO OCEANOGRAPHY</td>
<td>(3)</td>
<td>Overview of biological, chemical, geological, and physical oceanography. (Also listed under Geology.)</td>
</tr>
<tr>
<td>OGB 5050</td>
<td>GEOLOGICAL OCEANOGRAPHY</td>
<td>(3)</td>
<td>PR: Graduate standing or CI. An introduction to the physical, historical sedimentary, and structural geology of the ocean basins and their borders. Lec.-lab.</td>
</tr>
<tr>
<td>OCP 5051</td>
<td>PHYSICAL OCEANOGRAPHY</td>
<td>(3)</td>
<td>PR: Graduate standing, CI, PHY 3042. The world ocean including its morphology, physical properties, currents, waves, tides, heat budget, and related topics. Lec.-lab.</td>
</tr>
<tr>
<td>ADV 3000</td>
<td>INTRODUCTION TO ADVERTISING</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>ADV 3002</td>
<td>ADVERTISING DESIGN</td>
<td>(3)</td>
<td>PR: ADV 3000 for advertising majors; VIC 3000 for other Mass Comm majors. Application of graphic design principles to various areas of advertising. Combining visual and verbal elements effectively.</td>
</tr>
<tr>
<td>ADV 3101</td>
<td>ADVERTISING COPYWRITING</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>ADV 3103</td>
<td>RADIO-TELEVISION ADVERTISING</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>ADV 3300</td>
<td>ADVERTISING MEDIA STRATEGY</td>
<td>(3)</td>
<td>PR: ACG 2001, ADV 3000, ECO 2023 and ECO 2013. Problems, techniques, strategy of media research, planning, budgeting and effective utilization in advertising.</td>
</tr>
<tr>
<td>ADV 3700</td>
<td>RETAIL ADVERTISING PLANNING AND EXECUTION</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>ADV 4800</td>
<td>ADVERTISING CAMPAIGNS</td>
<td>(3)</td>
<td>PR: ACG 2001, ADV 3101, ADV 3300, MMC 4420, 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.</td>
</tr>
<tr>
<td>ADV 4940</td>
<td>ADVERTISING PRACTICUM</td>
<td>(1)</td>
<td>PR: CI. 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.)</td>
</tr>
<tr>
<td>FIL 3004</td>
<td>THE FILM AS MASS COMMUNICATION I: SYNTAX</td>
<td>(3)</td>
<td>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 nonverbal communication. Concurrent laboratory experiences in control of light and sound.</td>
</tr>
<tr>
<td>FIL 3200</td>
<td>THE FILM AS MASS COMMUNICATION II: RHETORIC AND STYLISTICS</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>FIL 4206</td>
<td>ADVANCED FILM LIGHTING</td>
<td>(3)</td>
<td>PR: FIL 4205. Advanced lighting of studio and location sets stressing professional procedures and standards from preproduction to post production.</td>
</tr>
<tr>
<td>FIL 4207</td>
<td>SENSITOMETRY AND PHOTOMETRICS</td>
<td>(3)</td>
<td>PR: FIL 3004. The materials and processes of cinema photo; response of materials to development and exposure.</td>
</tr>
<tr>
<td>FIL 4404</td>
<td>SOCIAL HISTORY OF THE FILM, 1945 TO THE PRESENT</td>
<td>(3)</td>
<td>PR: MMC 3100 and MMC 3602. The development of the film from 1945 to the present.</td>
</tr>
<tr>
<td>JOU 3006</td>
<td>MAGAZINES IN SOCIETY</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>JOU 3100</td>
<td>BEGINNING REPORTING</td>
<td>(3)</td>
<td>PR: MMC 3100 and MMC 3602. Basic instruction in news judgment, sources of news, newsgathering, and newswriting techniques. Typing ability is required.</td>
</tr>
</tbody>
</table>
| JOU 3101    | ADVANCED REPORTING                              | (3)     | PR: POS 2041, JOU 3100, or RTV 3300 (RTV majors only), JOU 4200 (may be taken concurrently), 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 3300 MAGAZINE ARTICLE AND FEATURE WRITING (3)  
PR: CRW 2100, JOU 3100. Planning, researching, writing, and marketing articles for general and special interest magazines and newspaper magazine supplements; experiences in developing article idea; inductive analysis of contemporary magazine articles.

JOU 3306 CRITICAL WRITING: EDITORIALS, REVIEWS, COLUMNS (3)  
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 personal columns.

JOU 3940 REPORTING PRACTICUM (1)  
PR: JOU 3101 and Cl. 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 the tutelage of a professional practitioner. (S/U only.)

JOU 4204 PUBLIC AFFAIRS REPORTING (3)  
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 4206 NEWS EDITING I (3)  
PR: ECO 2013, JOU 3100, and SYG 3010. Evaluating news and its display; editing and rewriting copy for the mass media, with emphasis on the daily newspaper; news judgment, headlines, makeup, ethical problems.

JOU 4206 NEWSPAPER DESIGN AND TYPOGRAPHY (3)  
PR: JOU 4200 or Cl. 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 4941 EDITING PRACTICUM (1)  
PR: Senior standing, JOU 4200 and Cl. 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 (1)  
PR: Senior standing and Cl. 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 3100 WRITING FOR THE MASS MEDIA (3)  
PR: Sophomore standing; 2.7 GPR; grade of "C" in ENC 1101, ENC 1102, 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 (3)  
PR: Sophomore standing. A survey of the history, theory processes, and philosophy of mass communications and the mass media in the United States, and their relationship to the other major institutions of American society.

MMC 4123 MEDIA SCRIPT WRITING (3)  
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 (3)  
PR: MMC 3100 and MMC 3602. Historic and Constitutional backgrounds 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 4203 COMMUNICATION ETHICS (3)  
PR: MMC 3602 and MMC 3100 or Cl. A study of the fundamental principles and philosophy of ethics and their application to the decision-making process in the various professions of mass communications.

MMC 4420 RESEARCH METHODS IN MASS COMMUNICATIONS (3)  
PR: MMC 3100, MMC 3602. 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. Reading and directed study in special topics.

MMC 4910 INDIVIDUAL RESEARCH IN MASS COMMUNICATIONS (1-3)  
PR: CC and Cl. 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 STUDIES (1-3)  
PR: Junior standing. Courses designed to meet current or specific topics of interest to instructors and students.

MMC 4945 MEDIA INTERNSHIP-SEMINAR (1)  
PR: Cl 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.)

PGY 3610 PHOTOJOURNALISM I (3)  
PR: MMC 3100 and MMC 3602. Camera operation, darkroom techniques, picture composition; editing, ethics, history, and laws in connection with photojournalism.

PGY 3620 PHOTOJOURNALISM II (3)  
PR: PGY 3610. 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.

PGY 4110 COLOR PHOTOGRAPHY (3)  
PR: PGY 3620. 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.

PUR 3000 PRINCIPLES OF PUBLIC RELATIONS (3)  
PR: 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 4401, PUR 4100, and MMC 4420. 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 4100 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 principles and techniques to problem-solving situations drawn from case studies; writing formats used in promotional and publicity literature.

PUR 4401 PUBLIC RELATIONS: ISSUES, PRACTICES AND PROBLEMS (3)  
PR: PUR 3000. The theory of public relations practice and its application in the real world. The role of the public relations practitioner in business, government and social institutions, and the nature of specialized areas of the practice. Identification of public issues, analysis of potential impact on organizations and development of strategies to deal with them successfully and responsibly. Communication techniques and trends.

PUR 4700 PUBLIC RELATIONS PRACTICUM (1)  
PR: Senior standing and Cl. 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 3100 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 3510 or CRW 2100, 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. An introduction to the techniques and applications of field television production and electronic editing.

RTV 3320 BROADCASTING ANNOUNCING (3)
PR: ORI 3000, RTV 3000, SPC 2023 or SPC 2050. Development of skills required for effective announcing and other appearances before microphone and camera.

RTV 3300 BROADCAST NEWS (4)
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 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 and RTV 3225. Techniques in writing and filming for television news.

RTV 4320 ELECTRONIC FIELD PRODUCTION (3)
PR: RTV 3300 or RTV 3225. Advanced producing, scripting, lighting, camera, and editing for video production on location. Introduction to computer editing and graphics.

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, RTV 3300, MMC 4200 and POS 2112, or RTV 3000, RTV 4500, RTV 3100 or RTV 3300, and Senior standing. 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 graphics.

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.)

MATHEMATICS

CGS 3422 COMPUTER APPLICATIONS TO MATHEMATICS - 6A (3)
PR: MAC 3311 or MAC 3281. Corequisite: MAS 3103. Introduction to FORTRAN (WATFIV) with special emphasis on its applications to Mathematics.

COP 4210 MATHEMATICAL PROBLEM SOLVING USING PASCAL - 6A (3)
PR: MAS 3103, and the ability to program at least one other language. The highly structured programming language PASCAL is used to solve numerical and non-numerical problems in mathematics involving graph theory, combinatorics, and number theory. Non-numerical data structures and algebraic manipulation are emphasized.

MAA 4211 MULTIVARIATE CALCULUS - 6A (4)
PR: MAC 3313 or MAC 3283 with a grade of "C" or better, MAS 4301 and MAS 3103 or CI. Vector-valued functions, multiple integrals, line and surface integrals.

MAA 4212 INTERMEDIATE ANALYSIS - 6A (4)

MAA 5306 REAL ANALYSIS I (3)

MAA 5307 REAL ANALYSIS II (3)
PR: MAA 5306. Continuation of MAA 5306.

MAC 4215 APPLIED COMPLEX ANALYSIS (3)
PR: CI. Complex numbers, analytic and harmonic functions. Series. Contour integrals, residue theory, Conformal mappings. (A survey course emphasizing techniques and applications.)

MAC 5405 TOPICS IN COMPLEX ANALYSIS (3)
PR: MAA 5405. Univalent and Multivalent functions, entire functions, approximation theory in the plane.

MAC 2102 COLLEGE ALGEBRA - 6A (3)
PR: Passing score on placement test. Students should have the equivalent of two years high school math including one year of algebra or HCC mathematics course MAT 1033 taught on USF campus. Real numbers and their properties, algebraic expressions, equations and inequalities, functions, polynomials, exponential and logarithmic functions. Not for math majors. (No credit for students with credit in MAC 2132.)

MAC 2114 COLLEGE TRIGONOMETRY - 6A (2)
PR: Pass placement test. Angles, Trigonometric functions, properties and graphs of trigonometric functions, right triangles, laws of sines and cosines, polar coordinates. (No credit for math majors with credit in MAC 2132.)

MAC 2132 COLLEGE ALGEBRA AND TRIGONOMETRY - 6A (4)
PR: Two years of secondary school mathematics including one year of algebra or HCC mathematics course MAT 1033, taught on USF campus or CC, pass placement test in algebra. Real numbers and their properties, algebraic expression, equations and inequalities, functions, polynomials, exponential and logarithmic functions. Angles, trigonometric functions, properties and graphs of trigonometric functions, right triangles, laws of sines and cosines, polar coordinates. (No credit for MAC 2132 for students with credit in MAC 3233 or MAC 2102.)

MAC 3233 ELEMENTARY CALCULUS I - 6A (4)
PR: Pass placement test in algebra. Students should have two years of secondary school mathematics including one year of algebra or HCC mathematics course MAT 1033 taught on USF campus or CC. Algebra, functions, differentiation, applications. MAC 3233-MAC 3234 is primarily for students from Biological Sciences, Social Sciences, and Business. (No credit for math majors with credit in MAC 3281 or MAC 3311.)

MAC 3234 ELEMENTARY CALCULUS II - 6A (4)
PR: MAC 3233. Antiderivatives, the definite integral, techniques of integration, logarithmic and exponential functions, applications. (No credit for Mathematics majors or students with credit in MAC 3282 or MAC 3312.)

MAC 3281 ENGINEERING CALCULUS I - 6A (3)
PR: MAC 2132 with a "C" or better or CC. Pass placement tests in algebra and trigonometry. Differentiation, limits, differentials, extrema, indefinite integral. (No credit for students with credit in MAC 3233 or MAC 3311.)

MAC 3282 ENGINEERING CALCULUS II - 6A (3)
PR: MAC 3281. Definite integral, trigonometric functions, log, exponential, applications. (No credit for students with credit in MAC 3234
or MAC 3312.)

MAC 3283 ENGINEERING CALCULUS III -6A (3)
PR: MAC 3282. Techniques of integration, numerical methods, analytic geometry, polar coordinates, Vector algebra, applications. (No credit for students with credit in MAC 3313.)

MAC 3311 CALCULUS I -6A (4)
PR: MAC 2132 with a grade of "C" or better or CC. Pass placement tests in algebra and trigonometry. Limits, derivatives, applications. No credit for students with credit in MAC 3233 or MAC 3281.)

MAC 3312 CALCULUS II -6A (4)
PR: MAC 3311 with a grade of "C" or better or CC. Antiderivatives, the definite integral, applications, log, exponential and trig functions. (No credit for students with credit in MAC 3234 or MAC 3282.)

MAC 3313 CALCULUS III -6A (4)
PR: MAC 3312 with a grade of "C" or better or CC. Integration, polar coordinates, conic sections, vectors, indeterminate forms and proper integrals. (No credit for students with credit in MAC 3283.)

MAD 3100 DISCRETE MATHEMATICS -6A (4)
PR: MAC 2801 or MAC 3111 or Cl. An introduction to some of the aspects of discrete mathematics that are fundamental to digital computing. Topics include sets, numbers, algorithms, Boolean algebra, computer arithmetic, elementary combinatorics and an introduction to graph theory.

MAD 4401 NUMERICAL ANALYSIS -6A (4)
PR: MAS 3103; ability to program a digital computer. Interpolation and quadrature, finite differences, numerical solution of algebraic and transcendental equations, numerical solution of differential equations, computer techniques.

MAD 5101 LISP: PROGRAMMING WITH ALGEBRAIC APPLICATIONS (3)
PR: Programming experience or Cl. The powerful algebraic language LISP is introduced. The course covers (1) programming in LISP, (2) functional languages, (3) foundations of the Lambda Calculus, and (4) algebraic applications in artificial intelligence (theorem proving and game playing).

MAD 5308 INTRODUCTION TO GRAPH THEORY (3)
PR: CC. Brief introduction to classical graph theory (4-color theorem, etc.), directed graphs, connected digraphs, condensations, incidence matrices, Polyá's Theorem, networks.

MAE 5875 ABSTRACT ALGEBRA FOR TEACHERS (3)
PR: MAS 3103 and MAS 4301 and bachelor's degree or CC. Groups, fields, vector spaces as they relate to high school algebra and geometry. (No credit for Mathematics majors.)

MAE 5877 MATHEMATICAL ANALYSIS FOR TEACHERS (3)
PR: MAC 3313 and bachelor's degree or CC. Advanced consideration of limits continuity, derivatives, differentials. (No credit for Mathematics majors.)

MATH 4302 DIFFERENTIAL EQUATIONS -6A (3)
PR: MAC 3313. First order linear and nonlinear differential equations, higher order linear equations, applications.

MATH 5205 MATHEMATICAL OPTIMIZATION THEORY I (3)
PR: MAS 3103 and MAA 4211, or equivalent. Content: Unconstrained and linearly constrained extremum linear and nonlinear programming, application to matrices and quadratic forms, Lagrange multiplier rule for equality constraints.

MATH 5316 ORDINARY DIFFERENTIAL EQUATIONS I (3)
PR: MATH 4302, MAA 4211, or Cl. Existence and uniqueness theory, properties of solutions, linear systems, stability theory, Sturm-Liouville theory.

MATH 5317 ORDINARY DIFFERENTIAL EQUATIONS II (3)
PR: MATH 5316 or MAA 5307 or Cl. Topics selected from fixed point theory, comparison theory, oscillation theory, Poincaré-Bendixon Theory, Lyapunov functions, eigenfunction expansions.

MATH 5345 APPLIED PARTIAL DIFFERENTIAL EQUATIONS (3)
PR: MATH 5407 and Cl. Separation of variables, the heat equation, wave equation, Laplace's equation, classification, Green's functions, with emphasis on applications.

MATH 5407 METHODS OF APPLIED MATHEMATICS (3)

MAS 3103 LINEAR ALGEBRA -6A (3)
CR: MAC 3283 or 3313, or Cl. Linear equations, matrices, real vector spaces, relationship between linear transformations and matrices, determinants, inner product spaces, eigenvalues and eigenvectors.

MAS 4124 NUMERICAL LINEAR ALGEBRA -6A (3)
PR: MAS 3103. This course will consider efficient and stable numerical methods for dealing with matrix computations such as the solution of systems, calculation of eigenvalues and vectors, least squares, and so on.

MAS 4156 VECTOR ANALYSIS -6A (3)
PR: MAC 3313 or MAC 3283 or Cl. The algebra and calculus of vectors, line and surface integrals, Divergence Theorem, Stokes' Theorem, generalized coordinates, applications. (No credit for both MAA 4211 and MAS 4156.)

MAS 4301 ELEMENTARY ABSTRACT ALGEBRA -6A (3)
PR: MAC 3311, MAC 3281, or Cl. An introduction to basic set theory: sets, functions, and relations. An introduction to the basic algebraic structures: groups, rings, and fields. Homomorphisms and isomorphisms. A rigorous treatment of the real and complex number systems.

MAS 5107 ADVANCED LINEAR ALGEBRA (3)
PR: MAS 3103, MAS 4301 (or MGF 4102) or Cl; CR: MAS 5311. The study of finite dimensional vector spaces over arbitrary fields. Topics covered include dual spaces, canonical forms for linear transformations, inner product spaces, orthogonal, unitary and self-adjoint operators and quadratic forms.

MAS 5315 NUMBER THEORY (3)
PR: Cl. Congruences, quadratic residues, selected topics.

MAS 5311 ALGEBRA I (3)
PR: MAC 3313, MAS 5107, MAS 4301. An introduction to group theory.

MAS 5312 ALGEBRA II (3)
PR: MAS 5311. An introduction to Galois theory.

MAT 2930 SELECTED TOPICS IN MATHEMATICS (1-4)
PR: Cl. The course content will depend on the interest of faculty members and student demand.

MAT 4906 INDEPENDENT STUDY -6A (1-4)
PR: Cl. Specialized independent study determined by the student's needs and interests. The written contract required by the College of Natural Sciences specifies the regulations governing independent study. May be repeated. (S/U only.)

MAT 4930 SELECTED TOPICS IN MATHEMATICS -6A (1-4)
PR: Cl. The course content will depend on the interest of faculty members and student demand.

MAT 4937 MATHEMATICS MAJORS SEMINAR -6A (1)
Directed discussions on a variety of topics of interest to math majors, including career opportunities in mathematics. May be repeated up to 2 credit hours. (S/U only.)

MAT 4939 MATHEMATICS HONORS SEMINAR -6A (1)
PR: Admission to Mathematics Honors Program or Cl. Directed discussions on a variety of topics of mathematical interest. May be repeated up to 8 credit hours. (S/U only.)

MAT 4970 MATHEMATICS SENIOR THESIS -6A (3)
PR: Admission to Mathematics Honors Program and Cl. Course restricted to mathematics majors. (S/U only.)

MAT 5932 SELECTED TOPICS (1-4)
PR: Senior or Junior Standing and CC. Each topic is a course of study. 01-History of Mathematics, 03-Logic and Foundations, 05-Number Theory, 07-Topics in Algebra, 09-Mathematics for Physics, 11-Topics in Probability and Statistics, 13-Topics in Analysis, 15-Topics in Topology.

MGF 2130 MODERN MATHEMATICS WITH MICROCOMPUTERS -6A (4)
PR: Same as for MGF 2202. Topics in finite math, real vs. computer number systems, inequalities, functions, graphs, introduction to BASIC programming and microcomputers, exact and approximate solutions of algebraic equations, probability, computer simulations of models.
MGF 2202 FINITE MATHEMATICS -6A (3)
PR: Passing score on placement test. Students should have the equivalent of two years high school math including one year of algebra or HCC mathematics course MAT 1053 taught on USF campus. Linear functions, matrices and systems of linear equations, linear programming, logic sets, permutations and combinations, introduction to statistics, introduction to probability.

MTH 4102 LOGIC AND SET THEORY -6A (3)
PR: MAC 3311 or MAC 3281, or consent of instructor. First half: An introduction to the Propositional and Predicate Calculus, concentrating on proofs. Second half: An introduction to naïve set theory, up to cardinal numbers, concentrating on sets of numbers.

MTH 5306 ELEMENTARY MATHEMATICAL LOGIC (3)
PR: CC. Truth tables, tautologies, quantifiers, rules of inference, informal proofs in mathematics.

MTH 5405 HISTORY OF MATHEMATICS (3)
PR: MAC 3313. Traces the development of mathematical ideas through history. Special emphasis is placed on those concepts which led to the Calculus. This course is open to majors and non-majors alike.

MTG 4212 GEOMETRY -6A (4)
PR: MAC 3311. Emphasis on axiomatics, advanced Euclidean geometry, elements of projective geometry, non-Euclidean geometries.

MTG 5316 TOPOLOGY I (3)

MTG 5317 TOPOLOGY II (3)
PR: MTG 5316. Continuation of MTG 5316.

STA 3023 INTRODUCTORY STATISTICS I -6A (4)
PR: Passing score on placement test. Hypothesis testing, estimation; normal, Chi-square, t, F, binomial, multinomial distributions; ANOVA, CR, RCB designs; single df, regression, correlation, contingency tables. Students who successfully complete this course may not also receive credit for GEB 2111 or STA 3122. (No credit for Mathematics Majors.)

STA 3024 INTRODUCTORY STATISTICS II -6A (3)
PR: STA 3023 or CC. Factorials, ANCOV; multiple curvilinear regression; response surfaces; Latin squares, Split Plots, incomplete designs; distribution free methods.

STA 3404 ELEMENTARY PROBABILITY -6A (3)
Counting techniques, probability, expectation, probability distributions, the law of large numbers. (No credit for Mathematics majors. Credit for Department of Biology majors.)

STA 4321 INTRODUCTION TO STATISTICS -6A (3)

STA 4442 INTRODUCTION TO PROBABILITY -6A (3)
PR: MAC 3313, MAS 4301. Introduction to probability theory using calculus. Basic ideas of probability and random variables, discrete probability functions, continuous probability densities including normal, gamma, x (Greek letter Chi), and Weibull, and transformations of random variables.

STA 5166 COMPUTATIONAL STATISTICS I (3)
PR: STA 4321, CGS 4322 or CC. Statistical Analysis of data by means of statistics package programs. Regression, ANOVA, discriminant analysis, and analysis of categorical data. Emphasis is on inter-relation between statistical theory, numerical methods, and analysis of real life data.

STA 5206 STOCHASTIC PROCESSES (4)
PR: STA 5446. Stochastic processes in discrete time, including Markov chains on a countable state space, martingales, optional-sampling and ergodic theory of stationary processes; simple continuous-time Markov processes with a countable state space, such as Poisson Processes and Branching process. Renewal processes.

STA 5326 MATHEMATICAL STATISTICS (4)
PR: STA 5448. Sample distribution theory, point and interval estimation, optimality theory, statistical decision theory and hypothesis testing.

STA 5446 PROBABILITY THEORY I (3)
PR: STA 4442. MAA 5306. Axioms of probability, random variables in Euclidean spaces, moments and moment generating functions, modes of convergence, limit theory for sums of independent random variables.

STA 5447 PROBABILITY THEORY II (3)
PR: STA 5446. Proof of strong law of large numbers, characteristic functions, Lindeberg-Feller theorem, uniform integrability, martingale inequalities and convergence theorems, Birkhoff's ergodic theorem, subadditive ergodic theorem and applications.

STA 5526 NON-PARAMETRIC STATISTICS (4)
PR: STA 5526, CC. Theory and methods of non-parametric statistics, order statistics, tolerance regions and their applications.

MEDICAL TECHNOLOGY

MLS 3031 INTRODUCTION TO MEDICAL TECHNOLOGY (1)
PR: Senior standing and acceptance into an approved affiliated hospital. An introduction to the principles and practices of medical technology and their relationship to patient care. A hospital internship course for medical technology majors.

MLS 4860 CLINICAL MICROSCOPY I (2)
PR: Senior standing and acceptance into an approved affiliated hospital. Lecture and laboratory instruction such as urinalysis, parasitology, and histological technique. A hospital internship course for medical technology majors.

MLS 4861 CLINICAL MICROSCOPY II (4)
PR: Senior standing and acceptance into an approved affiliated hospital. A continuation of MLS 4215. A hospital internship course for medical technology majors.

MLS 4862 HEMATOLOGY (6)
PR: Senior standing and acceptance into an approved affiliated hospital. Lecture and laboratory instruction in the methods of study of hematological disorders. A hospital internship course for medical technology majors.

MLS 4863 CLINICAL BACTERIOLOGY (6)
PR: Senior standing and acceptance into an approved affiliated hospital. Instruction in lecture and laboratory on the various aspects of morphology, physiology, and classification of bacteria, especially those related to disease. A hospital internship course for medical technology majors.

MLS 4864 CLINICAL CHEMISTRY I (6)
PR: Senior standing and acceptance into an approved affiliated hospital. Instruction in the techniques and procedures for use in clinical chemical analyses. A hospital internship course for medical technology majors.

MLS 4865 CLINICAL CHEMISTRY II (4)
PR: Senior standing and acceptance into an approved affiliated hospital. A continuation of MLS 4864, including procedures required for serology, transfusions, blood preservation, and antibody studies. A hospital internship course for medical technology majors.

MLS 4866 CLINICAL LABORATORY INSTRUMENTAL ANALYTICAL TECHNIQUES (1)
PR: Senior standing and acceptance into an approved affiliated hospital. Instruction in the use of special laboratory instruments such as automated instruments, use of radiotopes, and techniques of measuring basal metabolism. A hospital internship course for medical technology majors.

PHILOSOPHY

PHH 3062 HISTORY OF PHILOSOPHY: ANCIENT AND MEDIEVAL (3)
A survey of Western philosophy from the pre-Socraticas to the end of the Middle Ages.

PHH 3420 HISTORY OF PHILOSOPHY: MODERN (3)
A survey of Western philosophy from the end of the Middle Ages to the nineteenth century.

PHH 3440 CONTINENTAL PHILOSOPHY (3)
A study of developments in post-Kantian European philosophy.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHH 4600</td>
<td>CONTEMPORARY PHILOSOPHY -6A</td>
<td>(3)</td>
<td>Selected schools of twentieth century thought such as idealism, positivism, pragmatism, realism, and existentialism.</td>
</tr>
<tr>
<td>PHH 4700</td>
<td>AMERICAN PHILOSOPHY -6A</td>
<td>(3)</td>
<td>Major traditions in American thought, Puritanism, the Enlightenment, Transcendentalism, Idealism, Pragmatism, and Analytic Philosophy in relation to American culture.</td>
</tr>
<tr>
<td>PHI 1000</td>
<td>GREAT PHILOSOPHERS OF THE WESTERN WORLD</td>
<td>(2)</td>
<td>Lectures and discussions of the great philosophers since Plato, focusing on particular problems.</td>
</tr>
<tr>
<td>PHI 1010</td>
<td>PHILOSOPHIC CONTROVERSIES</td>
<td>(2)</td>
<td>A discussion of central controversies in philosophy such as the nature of love, violence, freedom, truth, morality, etc.</td>
</tr>
<tr>
<td>PHI 1103</td>
<td>CRITICAL THINKING</td>
<td>(3)</td>
<td>Methods of thinking that lead to reliable conclusions, with emphasis on concrete cases in ordinary thinking and the sciences.</td>
</tr>
<tr>
<td>PHI 2100</td>
<td>INTRODUCTION TO FORMAL LOGIC -6A</td>
<td>(3)</td>
<td>An elementary study of propositional, predicate, and syllogistic logic with some attention to basic problems of logical theory.</td>
</tr>
<tr>
<td>PHI 3000</td>
<td>INTRODUCTION TO PHILOSOPHY -6A</td>
<td>(3)</td>
<td>An introduction to selected philosophical problems and traditions.</td>
</tr>
<tr>
<td>PHI 3600</td>
<td>ETHICAL THEORY</td>
<td>(3)</td>
<td>A study of ethical theories, concepts, problems and methods.</td>
</tr>
<tr>
<td>PHI 3631</td>
<td>ETHICS AND BUSINESS</td>
<td>(3)</td>
<td>An application of traditional ethical theories to contemporary problems in business.</td>
</tr>
<tr>
<td>PHI 3634</td>
<td>BIO MEDICAL ETHICS</td>
<td>(3)</td>
<td>This course will focus on the ethical issues arising from advances in medical practice, delivery of health care, and scientific research.</td>
</tr>
<tr>
<td>PHI 3636</td>
<td>ENVIRONMENTAL ETHICS</td>
<td>(3)</td>
<td>A study of alternative theories of environmental ethics, including the application of these theories to contemporary environmental problems, such as pollution, resource depletion, species extinction, and land use.</td>
</tr>
<tr>
<td>PHI 3700</td>
<td>PHILOSOPHY OF RELIGION -6A</td>
<td>(3)</td>
<td>Analysis of religious experience and activity and examination of principal religious ideas in light of modern philosophy.</td>
</tr>
<tr>
<td>PHI 3905</td>
<td>DIRECTED STUDY</td>
<td>(1-4)</td>
<td>PR: CI. Individual study directed by a faculty member. Approval slip from instructor required.</td>
</tr>
<tr>
<td>PHI 3930</td>
<td>SELECTED TOPICS</td>
<td>(1-4)</td>
<td>PR: CI. Selected topics according to the needs of the senior students. Approval slip from instructor required.</td>
</tr>
<tr>
<td>PHI 4300</td>
<td>THEORY OF KNOWLEDGE -6A</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>PHI 4320</td>
<td>PHILOSOPHY OF MIND -6A</td>
<td>(3)</td>
<td>A study of historical and current issues in philosophy of mind, including the nature and status of mind, mind/body dualism, the relationship of mind and body, the problems of other minds, the physical basis for intelligence, etc.</td>
</tr>
<tr>
<td>PHI 4800</td>
<td>AESTHETICS -6A</td>
<td>(3)</td>
<td>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.</td>
</tr>
<tr>
<td>PHI 4905</td>
<td>DIRECTED STUDY</td>
<td>(1-4)</td>
<td>PR: CI. Individual study directed by a faculty member. Approval slip from instructor required.</td>
</tr>
<tr>
<td>PHI 4930</td>
<td>SELECTED TOPICS</td>
<td>(1-3)</td>
<td>PR: CI. Selected topics according to the needs of the senior students. Approval slip from instructor required.</td>
</tr>
<tr>
<td>PHI 5135</td>
<td>SYMBOLIC LOGIC</td>
<td>(3)</td>
<td>PR: PHI 2100 or CI. Study of topics such as the following: Metatheory of propositional and predicate logic, related metatheoretic results, alternative logics.</td>
</tr>
<tr>
<td>PHI 5225</td>
<td>PHILOSOPHY OF LANGUAGE</td>
<td>(3)</td>
<td>PR: Eight hours of philosophy, major in linguistics, or CI. An examination of semantic, syntactical, and functional theories of language with special attention given to the problems of meaning, linguistic reference, syntactical form, and the relations between scientific languages and ordinary linguistic usage. Seminar format.</td>
</tr>
<tr>
<td>PHI 5913</td>
<td>RESEARCH</td>
<td>(1-4)</td>
<td>PR: CI. Individual research supervised by a faculty member. Approval slip from instructor required.</td>
</tr>
<tr>
<td>PHI 5934</td>
<td>SELECTED TOPICS</td>
<td>(1-3)</td>
<td>PR: CI. Selected topics according to the needs of the student. Approval slip from instructor required.</td>
</tr>
<tr>
<td>PHM 3021</td>
<td>PHILOSOPHIES OF LOVE AND SEX</td>
<td>(3)</td>
<td>Discussion of Philosophies of Love/Sex of Plato, Aristotle, Epicurus, Aquinas, Hume, Kant, Schopenhauer, Russell, Sartre, Marx, etc.</td>
</tr>
<tr>
<td>PHM 3100</td>
<td>SOCIAL PHILOSOPHY -6A</td>
<td>(3)</td>
<td>An analysis of rival theories of social order and their philosophical foundations.</td>
</tr>
<tr>
<td>PHM 3400</td>
<td>INTRODUCTION TO PHILOSOPHY OF LAW</td>
<td>(3)</td>
<td>A study of the fundamental concepts of law from a philosophic standpoint including crime, justice, punishment, free speech, insanity, etc.</td>
</tr>
<tr>
<td>PHM 4322</td>
<td>ANCIENT AND MEDIEVAL POLITICAL PHILOSOPHY -6A</td>
<td>(3)</td>
<td>A survey of political philosophy from 6 B.C. until 1600 A.D., including an examination of the ethical, metaphysical, and epistemological bases of these philosophies.</td>
</tr>
<tr>
<td>PHM 4331</td>
<td>MODERN POLITICAL PHILOSOPHY -6A</td>
<td>(3)</td>
<td>A survey of political philosophy from 1600 A.D until 1900 A.D., including an examination of the ethical, metaphysical, and epistemological bases of these philosophies.</td>
</tr>
<tr>
<td>PHM 4340</td>
<td>CONTEMPORARY POLITICAL PHILOSOPHY -6A</td>
<td>(3)</td>
<td>A survey of political philosophy in the twentieth century, including an examination of the ethical, metaphysical and epistemological bases of these philosophies.</td>
</tr>
<tr>
<td>PHP 3786</td>
<td>EXISTENTIALISM -6A</td>
<td>(3)</td>
<td>A study of the religious and atheistic existentialists and the bearing of their views on religion, ethics, metaphysics, and theory of knowledge.</td>
</tr>
<tr>
<td>PHP 4000</td>
<td>PLATO -6A</td>
<td>(3)</td>
<td>The examination of Plato will include the dialogues Protagoras, Georgias, Meno, Republic, etc.</td>
</tr>
<tr>
<td>PHP 4010</td>
<td>ARISTOTLE -6A</td>
<td>(3)</td>
<td>Study of Aristotle's philosophy.</td>
</tr>
<tr>
<td>PHP 4410</td>
<td>KANT</td>
<td>(3)</td>
<td>Lecture and discussion of Kant's philosophy, especially The Critique of Pure Reason.</td>
</tr>
<tr>
<td>PHP 4740</td>
<td>RATIONALISM -6A</td>
<td>(3)</td>
<td>A careful study of the epistemologies of Descartes, Spinoza, Leibniz, and Malebranche.</td>
</tr>
<tr>
<td>PHP 4748</td>
<td>EMPIRICISM -6A</td>
<td>(3)</td>
<td>A careful study of epistemologies of Locke, Berkeley, Hume, and Thomas Reid.</td>
</tr>
<tr>
<td>PHP 4784</td>
<td>ANALYTICAL PHILOSOPHY -6A</td>
<td>(3)</td>
<td>A study of the method devoted to clarifying philosophical problems through analysis of the language in which these problems are stated.</td>
</tr>
<tr>
<td>PHP 4788</td>
<td>PHILOSOPHY OF MARXISM -6A</td>
<td>(3)</td>
<td>A critical survey of Marxist philosophy from Marx and Engels to Mao Tse-Tung and Herbert Marcuse. Hegelian foundations of Marxist philosophy analyzed in detail.</td>
</tr>
</tbody>
</table>
PHYSICS

PHZ 3101 MATHEMATICAL ANALYSIS OF PROBLEMS IN MECHANICS AND ELECTRICITY
PR: One year of non-calculus general physics. CR: MAC 3283 or MAC 3313. Designed for students who have not had the general physics sequence using calculus. Review of mechanics and electricity emphasizing problems which involve the use of calculus. Semesters: Fall, Spring.

PHZ 3102 PROBLEMS IN GENERAL PHYSICS I
CR: PHY 3048. First semester of two semester sequence of general physics problems. A course designed to allow those interested students to investigate problems not covered in the general physics course. Lec. Semesters: Fall, Spring, Summer.

PHZ 3103 PROBLEMS IN GENERAL PHYSICS II

PHZ 5115 METHODS OF THEORETICAL PHYSICS I
PR: MAP 4302 or Cl. Applications of mathematical techniques to classical and modern physics. Vector spaces including Hilbert space, orthogonal functions, generalized functions, Fourier analysis, transform calculus, and variational calculus. Fall Semester.

PHZ 5116 METHODS OF THEORETICAL PHYSICS II
PR: MAP 4302 or Cl. Applications of mathematical techniques to classical and modern physics. Selected topics in complex analysis, differential and integral equations, numerical methods, and probability theory. Spring Semester.

PHZ 5304 NUCLEAR PHYSICS
PR: PHY 4604 or Cl. Nuclear forces, nuclear models, nuclear structure, decay, nuclear reaction, and high energy physics. Spring Semester.

PHZ 5405 SOLID STATE PHYSICS I
PR: PHY 3101, MAP 4302. Crystal structure, x-ray and electron diffraction, mechanical and thermal properties of solids, electrical and magnetic properties of metals, band theory of metals, insulators, and semiconductors. First semester of sequence PHZ 5405, PHZ 6426. Spring Semester.

PHZ 5505 PLASMA PHYSICS I
PR: PHY 4324C or Cl. Introduction to Boltzmann, magnetohydrodynamic and orbit approaches to plasmas. Longitudinal and electromagnetic waves in plasmas. Collisions and radiation. Instabilities. Fall Semester.

PHY 2020 CONCEPTUAL PHYSICS
A qualitative, non-mathematical investigation of physics, emphasizing its influence on life today. (No credit for physics or mathematics majors.) Semesters: Fall, Spring, Summer.

PHY 2038 ENERGY AND HUMANITY
Social, economic, and political aspects of energy, including energy conservation, energy alternatives, personal use of solar energy, and changing life styles. Field trips and audiovisual presentations play important roles.

PHY 3048, 3048L GENERAL PHYSICS AND LABORATORY
PR: MAC 3281 or MAC 3311. First semester of a two semester sequence of general physics (mechanics, wave motion, sound, thermodynamics, geometrical and physical optics, electricity, and magnetism) and laboratory for physics majors and engineering students. Must be taken concurrently and, if dropped, then dropped simultaneously. Semesters: Fall, Spring, Summer.

PHY 3049, 3049L GENERAL PHYSICS AND LABORATORY
PR: MAC 3282 or MAC 3312, PHY 3048, PHY 3048L. Second semester of general physics and laboratory for physics majors and engineering students. Must be taken concurrently and, if dropped, then dropped simultaneously. Semesters: Fall, Spring, Summer.

PHY 3053, 3053L GENERAL PHYSICS AND LABORATORY
First semester of a two semester sequence of general physics (mechanics, heat, wave motion, sound, electricity, magnetism, optics, modern physics) and laboratory for science students. Must be taken concurrently and, if dropped, then dropped simultaneously. Semesters: Fall, Spring, Summer.

PHY 3054, 3054L GENERAL PHYSICS AND LABORATORY
PR: PHY 3053, PHY 3053L. Second semester of general physics and lab for science students. Must be taken concurrently and, if dropped, then dropped simultaneously. Semesters: Fall, Spring, Summer.

PHY 3101 MODERN PHYSICS

PHY 3221 MECHANICS I
CR: MAC 3283 or MAC 3313 and either PR: PHY 3048 or PHY 3101. First semester of a two semester sequence. Review of vector algebra and vector calculus. Dynamics of single particles and systems of particles; central forces; rotation about an axis; statics; and virtual work. Fall Semester.

PHY 3323C ELECTRICITY AND MAGNETISM I
PR: PHY 3049, MAC 3283 or MAC 3313. Electromagnetic circuits; resistance, capacitance, inductance, and alternating current circuits, thermoelectricity, and instrumentation. Laboratory. First semester of sequence PHY 3323C, PHY 4324C.

PHY 3424 OPTICS
PR: PHY 3101 or PHY 3049; CR: MAC 3283 or MAC 3313. Reflection, refraction, dispersion, interference, diffraction, polarization, and laboratory. Fall Semester.

PHY 3822L INTERMEDIATE LABORATORY
PR: PHY 3101 or PHY 3049 or equivalent; CR: PHY 3101 Experiments in modern physics, including the area of atomic, nuclear, solid state and wave phenomena. Fall Semester.

PHY 4222 MECHANICS II
PR: PHY 3121; CR: MAP 4302. Coupled oscillators and normal modes; moving coordinate systems; Lagrange's and Hamilton's equations; inertia tensor; general rotation of rigid bodies. Spring Semester.

PHY 4324C ELECTRICITY AND MAGNETISM II

PHY 4471 FUNDAMENTAL ACOUSTICS

PHY 4523 STATISTICAL PHYSICS

PHY 4604 QUANTUM MECHANICS I
PR: PHY 3101, PHY 4222, or Cl. Postulates, Schrodinger's equation, one dimensional problems, matrix mechanics, uncertainty principle, angular momentum, and central forces. First semester of sequence PHY 4604, PHY 5624. Fall Semester.

PHY 4744C ELECTRONICS FOR RESEARCH
PR: General Physics or Cl. Direct and alternating current circuits, transients, rectification, amplification, feedback, pulse circuits, and integrated circuits, laboratory. (No credit for physics or mathematics majors.) Semesters: Fall, Spring.

PHY 4823L ADVANCED LABORATORY
PR: PHY 3822L. Experimental work primarily related to nuclear physics. Emphasis on modern physical experimental techniques as well as some of the new types of equipment. Spring Semester.

PHY 4905 INDEPENDENT STUDY
CR: Cl. Specialized, independent study determined by the student's need and interest. The written contract required by the College of Arts and Sciences specifies the regulations governing independent study. May be repeated. (S/U only.)

PHY 4910 UNDERGRADUATE RESEARCH
PR: Senior or advanced junior standing and CC. An individual investigation in the laboratory or library or both, under the supervision of the instructor. Credit hours and other contractual terms, are
CPO 3002 INTRODUCTION TO COMPARATIVE POLITICS (3) Comparison and analysis of representative European and non-Western political systems.

CPO 4034 POLITICS OF THE DEVELOPING AREAS (3) An analysis of the ideologies, governmental structures, and political processes of selected nations of the non-Western world.

CPO 4930 COMPARATIVE GOVERNMENT AND POLITICS OF SELECTED COUNTRIES OR AREAS (3) Studies political systems with common elements. Structure, process, domestic and foreign politics, and regional roles are considered. May be repeated up to 9 credit hours as topics vary.

CPO 5934 SELECTED TOPICS IN COMPARATIVE POLITICS (3) Studies specific substantive areas in comparative politics such as economic policy or the politics of specific countries or regions. May be repeated for credit as topics vary.

INR 3002 INTRODUCTION TO INTERNATIONAL RELATIONS (3) Concepts and analytical tools applied to events such as politics among nations, control of foreign policies, types of actors, war and peace.

INR 3102 AMERICAN FOREIGN POLICY (3) Analysis of the development and scope of United States foreign policy, emphasizing goals and objectives, policy formulation and implementation, themes and issues.

INR 4035 INTERNATIONAL POLITICAL ECONOMY (3) Analysis of the development and politics of the international economic system, focusing on questions of cooperation and conflict in trade, aid, and investment relationships.

INR 4334 DEFENSE POLICY (3) Analytic institutional factors contributing to formulation of defense policy and the impact of such policy on international relations.

INR 4403 INTERNATIONAL LAW (3) Examines essential components of the international legal system; recognition; succession; sea, air and space law, treaties, diplomats, International Court of Justice; laws of war, etc. Introduces the student to legal reasoning as employed in the international context.

INR 4502 INTERNATIONAL ORGANIZATIONS (3) Study of the operations and structure of international organizations and effects on world politics; background and achievement of the UN; regional organizations and multi-national corporations.

INR 5086 ISSUES IN INTERNATIONAL RELATIONS (3) Explore specific topics and provides the student with an opportunity for in-depth study of historical and contemporary problems in international politics. May be repeated for credit as topics vary.

POS 2041 AMERICAN NATIONAL GOVERNMENT (3) Analysis of basic principles and procedures of the American government with emphasis on current issues and trends.

POS 2112 STATE AND LOCAL GOVERNMENT AND POLITICS (3) Analysis of the structure and function of state and local governments, of the social and political influences that shape them, and of the dynamics of their administrative processes.

POS 3142 INTRODUCTION TO URBAN POLITICS AND GOVERNMENT (3) Governmental and political structures and processes as they function in urban areas, with special focus on municipalities and locally based public services.

POS 3145 GOVERNING METROPOLITAN AREAS (3) Examines governmental units and interactions in metropolitan areas, proposals for changes in governance, and policy areas of area-wide concern, such as human services.

POS 3173 SOUTHERN POLITICS (3) Examines changes in electoral politics in the South, and the role of interest groups and the state and federal government in facilitating change.

POS 3192 FLORIDA POLITICS AND GOVERNMENT (3) A study of Florida political culture, political parties and elections, the legislative, executive, and judicial systems, and policy patterns.

POS 3273 PRACTICAL POLITICS (3) PR: POS 2041 or POS 3453 or CL Coordinated scholarly and practical activity through class lecture and supervised field work in local political parties and election campaigns.

POS 3283 JUDICIAL PROCESS AND POLITICS (3) The organization, development, and functioning of American court systems and the causes and consequences of judicial behavior from an empirical perspective.

POS 3453 POLITICAL PARTIES AND INTEREST GROUPS (3) Analysis and understanding of role, functions, structure, and composition of such, and their impact on American governmental institutions.

POS 3691 INTRODUCTION TO LAW AND POLITICS (3) Nature of law, legal process, relationship to political life of constitutional law, administrative law, the judicial process, and private law.

POS 3713 EMPIRICAL POLITICAL ANALYSIS (3) Fundamentals of empirical political inquiry: systematic data collection and quantitative analysis techniques. Laboratory exercises using the computer are required.

POS 3930 SELECTED TOPICS (3) Selected topics in political science with course content based upon student demand and instructor's interest. May be repeated for up to 6 credits as topics vary.

POS 4165 COMMUNITY LEADERS AND POLITICS (3) Analysis of the roles and powers of mayors, city managers, council members, and interest and ethnic groups; distribution of community power.

POS 4204 POLITICAL BEHAVIOR, PUBLIC OPINION, AND ELECTIONS (3) Analysis of economic and socio-psychological factors influencing mass and elite political behavior; voting behavior, public opinion, and political activism.

POS 4413 THE AMERICAN PRESIDENCY-6A (3) The presidency as a political institution; analysis of powers; legislative, administrative, political, and foreign policy leadership; crisis management and decision making; White House staffing; limits on power.

POS 4424 THE AMERICAN CONGRESS (3) Organization, procedures, committee system, party leadership, relations with governmental and nongovernmental organizations and agencies, oversight, decision-making processes, House/Senate comparisons.

POS 4614 CONSTITUTIONAL LAW I (3) PR: POS 2041. Leading social problems, principle institutions, and the scope of powers. Analysis of Supreme Court decisions, scholarly commentaries, and the writings of leading public figures.

POS 4624 CONSTITUTIONAL LAW II (3) PR: POS 2041. Analysis of Supreme Court decisions and scholarly commentaries on the constitutional rights of individuals.
POT 3003 INTRODUCTION TO POLITICAL THEORY

URP 4004 COMPARATIVE PSYCHOLOGY (3)
PR: PSY 3213 with a grade of C or better or Cl. The study of the evolution of behavior, similarities, and differences in capacities for environmental adjustment and for behavioral organization among important types of living beings.

CLP 3003 PSYCHOLOGY OF ADJUSTMENT (3)
Generic, organic, and learned factors involved in the processes of personal adjustment: applications of mental health principles to everyday living. Not for major credit.

CLP 4143 ABNORMAL PSYCHOLOGY (3)
PR: PSY 3213 with a grade of C or better or Cl. Descriptions, theoretical explanations, research evidence, and treatment of maladaptive behavior.

CLP 4414 BEHAVIOR MODIFICATION (3)
PR: PSY 3213 with a grade of C or better or Cl. Introduction to behavior analysis, and application of learning principles, behavioral measurement, research designs, and interventions in treatment settings.

CLP 4433 PSYCHOLOGICAL TESTS AND MEASUREMENT (3)
PR: PSY 3213 with a grade of C or better or Cl. A consideration of the instruments for intellectual and personality assessment including their applications, development, and potential abuses. Students may not receive credit for both CLP 4433, and EDF 4430.

DEP 3103 CHILD PSYCHOLOGY (3)
Developmental and psychosocial aspects of childhood, including hereditary, maturational, psychological, and social determinants of child behavior. Not for major credit.

DEP 4005 DEVELOPMENTAL PSYCHOLOGY (3)
PR: PSY 3213 with a grade of C or better or Cl. Survey of methods, empirical findings, and theoretical interpretations in the study of human and animal development.

DEP 4135 PSYCHOLOGY OF LANGUAGE DEVELOPMENT (3)
PR: PSY 3213 with a grade of C or better or Cl. Available both to majors and non-majors. Surveys the course of and processes underlying normal language development. Presents data and theory on phonological, semantic, syntactic, and pragmatic development.

EXP 4104 SENSORY PROCESSES (3)
PR: PSY 3213 with a grade of C or better or Cl. Available to both majors and non-majors. Psychophysical and neurophysiological data and theory underlying sensory processes. Visual, auditory, chemical, and somatosensory systems, with particular emphasis on visual processes.

EXP 4204 PERCEPTION (3)
PR: PSY 3213 with a grade of C or better or Cl. How man perceives his environment. Topics include sensory basis of perception, physical correlates of perceptual phenomena, and the effects of individual and social factors on perception.

EXP 4304 MOTIVATION (3)
PR: PSY 3213 with a grade of C or better or Cl. An examination of human and animal motivations from both physiological and psychological viewpoints.

EXP 4404 PSYCHOLOGY OF LEARNING (3)
PR: PSY 3213 with a grade of C or better or Cl. Survey of methods, empirical findings, and theoretical interpretations in conditioning and instrumental learning.

EXP 4523C COGNITIVE PSYCHOLOGY (3)
PR: PSY 3213 with a grade of C or better or Cl. Survey of methods, empirical findings, and theoretical interpretations of human learning, information processing, and verbal learning.

INP 3101 APPLIED PSYCHOLOGY (3)
The application of psychological principles and the functions of psychologist in education, government, industry, and clinical practice.

INP 4004 INDUSTRIAL PSYCHOLOGY (3)
PR: PSY 3213 with a grade of C or better or Cl. Applications of psy-